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GREATER YELLOWSTONE AREA FIRES

DAVE PETERSON

A HISTORY OF THE GREATER YELLOWSTONE AREA

FIRES OF 1988

A report prepared by David W. Peterson for Services
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INTRODUCTION

The summer of 1988 will long be remembered for the fires that burned in the Greater Yellowstone Area (GYA). The GYA is mainly comprised of lands managed by the National Park Service and the United States Forest Service. Among the great blocks of Federal land in the lower 48 states, the GYA fills the northwest corner of Wyoming, spilling generously into adjacent lands in Idaho and Montana. Falling in the domain of 12 counties, this huge expanse encompasses nearly 11.7 million acres. Major natural resource units include Yellowstone National Park, Grand Teton National Park, and portions of six national forests that surround them: the Beaverhead,[1] the Bridger-Teton,[2] the

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Dillon, Montana.

Jackson, Wyoming.

Custer,[3] the Gallatin,[4] the Shoshone,[5] and the Targhee.[6]

In June 1988, fires ignited that were destined to become lasting fixtures throughout the summer. Conditions of weather, fuel, and terrain came together on the stage of the GYA and choreographed conflagrations of historic proportions. Beginning in June, the show started slowly and gently. The first act was over by mid-July, and the scene was set for the grand crescendo of the second act that ended with drama and fury in a late August windstorm. After experiencing the fires up to that point, those working to suppress the blazes, residents in the locality, and those whose economic well-being were adversely affected by the fires were ready for a speedy denouement, but it was not to come. The fires continued to burn vigorously into September when, mercifully, rain and snow came and, without

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3 Billings, Montana.

4 Bozeman, Montana.

5 Cody, Wyoming.

6 St. Anthony, Idaho.

drawing curtains on the show, slowed its pace. Only then did actors and audience find relief from the tension and drama of the performance.

As a spectacle of drama, the fire was supported by a cast of thousands. At the peak of the suppression effort 10,000 firefighters aided by retardant bombers, helicopters, sprinkler lines, and other equipment vied to contain and control the blazes. Players who debated the prudence of Forest Service and Park Service fire policy entered the stage for soliloquies. What began as an opportunity for education about the natural role of fire in the environment soon heated to a series of vigorous discussions featuring factions which condemned fire policy and castigated those who carried them out. Other factions were more supportive of both agency policies and suppression efforts.

The mass media expanded the theater of the fires by extending the audience from a local, directly affected area into a national and international setting. The fires were of almost immediate interest, but media concern heightened as the specter of controversy appeared in an already fascinating process. Among

natural disasters covered by news media, the GYA fires of 1988 were unique. As Yellowstone National Park Superintendent Bob Barbee noted, "the difference between this catastrophe and any others that people are familiar with is the time scale. Most things happen quickly, earthquakes . . ." for example. "Floods usually are a little bit more prolonged . . . a matter of days. Floods crest and then they're over. Hurricanes are fast. All these other kinds of things that cause anguish to people are relatively fast. This thing blossomed and bloomed, and it got worse and worse . . . ."[7]

The duration of the fires, the controversy surrounding policy, and the attendant media interest spawned a great deal of political interest--a phenomenon accentuated by the election year. All these factors added up to a story of not only great natural consequence but also one of great human significance and political relevance.

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7 [illegible] with Bob Barbee, December 15, 1988

The managers of the parks and forests, including those who oversee them on the regional level and work for them on the local level, have a unique, enduring, and personal perspective of GYA fires of 1988. A collection of oral histories from key actors recorded during and shortly after the fires provides insight into that perspective. This is the story of the GYA fires of 1988 as told to large extent by those to whom the management of natural resources and the formation of public policy are every-day issues. They are not merely matters brought to consciousness when burned into their souls for a short time of intense but transitory interest caused by the crisis of fire.

At this point a statement should be made about the character and objectives of this study. From the first it is regarded as a history with multiple objectives. This was apparent in the contract under which it was conducted and in conversations with the contracting officers as well as professors at Utah State University's history department under whose supervision the study has unfolded. First, my efforts were to qualify the research as a master's thesis in history.

Second, I was to chronicle the story of the actors and agencies related most directly to the Greater Yellowstone Coordinating Committee in its fire management roles. Third, and most importantly, I was expected to provide a clear, honest, historical statement for future readers who were not directly involved in the fires of 1988 and the conditions and events leading to them.

Had the work been aimed at any one of these objectives singly it might have been managed differently. For example, if it had been written specifically as an internal document, less attention might have been paid to the historical process and context setting. The agency personnel involved were so close to it that historical process and context were already recorded in their minds. But as my work is considered in terms of historical methodology and future readers, it is necessary to include background and context to place the conditions and events of 1988 in a meaningful framework. A history never reiterates the entire flow of events which it records and interprets. I make no such pretense in the pages of my statement

about the fire. I have, however, made a conscientious effort to select and present information that will achieve the three objectives previously stated--meet standards as a historical thesis; present the roles of the individuals and agencies participating; and provide an accurate and meaningful account of the Yellowstone fires of 1988 for readers who might refer to my thesis in the future.

A writer's success in meeting self-imposed standards always depends on contribution from a variety of sources. Few historians, however, are as directly indebted to living contemporaries as I. First, I am indebted to Stan Tixier and other officers of the Intermountain Forest Service Region, particularly the staffs of the Information Office and of Aviation and Fire Management. They have patiently worked with me, helping me learn the essentials of resource and fire management history. They helped outline my research strategy and, in this study's unconventionally contemporary emphasis, they opened the doors to contacts in other parts of the GYA and helped make all the fact-finding resources at the disposal of the National

Park Service and the Forest Service available to me. In addition, foresters, directors, and officers in the other Forest Service Regions and the Rocky Mountain Region of the National Park Service have been helpful, taking time during the heat of the fires and afterward to explain their roles, discuss policy development, and provide information. Area and incident management teams helped when the press of their duties might have diverted them but for their courtesy and interest in the objectives of the project. Libraries and faculty members at Utah State University, various research centers, and elsewhere have been supportive.

I am especially indebted to those who cooperated in recording 16 oral histories that comprise the most important part of this work. All of them were involved in the GYA fires during the hectic summer of 1988. Most were Park Service and Forest Service line officers. A few were involved in area or incident command roles, including one who might be called an overhead officer, and an articulate "ground pounder" or firefighter from a Type II crew. Some were involved in scientific and research roles, some in top command situations, some in

public relations, and some served as local and regional aviation and fire officers. A strong set of oral histories represent the special perspective of the National Park Service. Other important points of view are developed by officers from the various Forest Service regions, forests, and districts.

Taken together, these 16 accounts provide a remarkable contemporary history of the Yellowstone fires of 1988. Rarely have major environmental events been narrated and commented upon by people better equipped to understand them. The oral histories, then, comprise the real strength of this work. Putting together an interview strategy and working to transcribe, edit, interpret, and present the results have been my primary responsibility and a rare opportunity. My efforts in the pages that follow represent an attempt to put the Yellowstone fires of 1988 into a context that will enhance the oral histories and help present them for future use.

CHAPTER I

"THE SUMMER RAINS DIDN'T COME"

The summer of 1988 was hot and dry. Managers of the Greater Yellowstone Area viewed the extreme weather as the greatest single contributor to an extraordinary fire season. While rainfall is only one aspect of climate, the paucity of precipitation during the summer of 1988 was indicative of a combination of factors that joined to create formidable burning conditions. In an average year, Yellowstone National Park can expect 4.49 inches of precipitation over June, July, and August, with nearly 2 inches falling in June and approximately 1 1/4 inches falling each of the latter months. During those 3 months in 1988, barely over 1 1/2 inches of precipitation fell, only 34 percent of normal.[8]

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8 Henry F. Diaz, Ninety-One Years of Weather Records at Yellowstone National Park, Wyoming: 1887-1977, (Asheville, N.C.: U.S. Department of Commerce, National Climatic Center, 1979); Yellowstone National Park, "The Yellowstone Fires: A Primer on the 1988 Fire Season," (Mammoth, WY: 1988).

Clearly, among other conditions, the summer of 1988 was a time of severe drought, not only for the Yellowstone region but for the Nation at large.

Drought in the Nation

Even before 1988, the 1980's had experienced several severe droughts. But unlike past droughts that materialized in midsummer, the drought of 1988 fell on the heels of a dry 1987, and xeric conditions continued in the winter through spring and summer. Previous droughts of the 1980's were more local or regional while the drought of 1988 affected much of the Nation.[9] Early in the year articles in major newspapers reflected concern for an impending drought. "Last year's drought caused serious problems in much of the West, emptying reservoirs, killing stream fish and setting the stage for terrible forest fires . . ." ran a March 26 article in the Washington Post. The article warned that experts were "anticipating another year as

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Ralph Chite, "Agriculture and the Drought of 1988," (Congressional Research Service Issue Brief # IB88073, August 17, 1988).

dry and more damaging than the last and an escalating cycle of water shortages to rival the devastating western drought and fires of 1977."[10]

As summer approached, concern over the threatening drought heightened. In the arid West, tension was particularly high. The issue of water, always volatile, was heating up. The title of a May article in U.S. News and World Report, "First Volleys of New Water Wars," reflected growing anxiety over water supply was heightening. "The drought of 1988 is scorching the West, making water-supply problems . . . as communities battle each other for a precious resource."[11] That Cain killed Abel for stealing water out of a western ditch is not a question debated by theologians but the maxim holds true for the arid West, particularly in a drought year.

Words such as menace, wrath, and cantankerous were used to describe the impending weather situation,

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10 Mathews, Jay. "Western Drought Worsens as Prospects for Precipitation Dry Up," Washington Post, 26 March 1988, p. A3.

11 "First Volleys of New Water Wars," U.S. News & World Report 104 (May 30, 1988): 20-22.

reflecting apprehension and even fear. "Drought of '88 menace grows slowly; Dry '87 Still Hurts West; a Montanan Prays," read a headline in the Wall Street Journal. The article cautioned that while 1988 stood as the fifth worst drought year since 1948, it came "on the heels of a dry 1987, making the current, two-year rain deficit the worst in four decades."[12]

Drought in the Greater Yellowstone Area

The Yellowstone region was no exception to the general 2-year pattern of short moisture. John Burns, Forest Supervisor of the Targhee National Forest and a man with a keen sense of history, noted that 1988 "was really the second dry season that we've had."[13] The latter portion of the summer of 1987 had been dry, and the severity of the parched conditions was reflected in fire behavior. Late-season fires on the Targhee had

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Ted L. Burch, "The Drought of 1988: Bibliography-in-Brief," (Congressional Research Service Report for Congress # 88-553 L, August 1988); 4 Marilyn Chase and Carrie Dolan, "Drought of '88 Menace . . . ," Wall Street Journal, 14 June 1988, p. 38.

Burns Oral History, .

been especially difficult to control. Burns explained that "they were controlled, but they got bigger than they normally do for us." It was the "first year that our people said, 'Gee, you know, this shows how lodgepole pine really can burn.'"[14]

On the Targhee, as elsewhere in the GYA, a dry winter followed the dry summer of 1987. Indeed, the dry winter followed a weather pattern of dry winters and wet summers that had been established for several years (see Table 1). In 1988, spring came early for the Yellowstone region, and Burns noted that "although we did have some early summer-late spring rainfall it wasn't really enough to make any difference in the heavy fuel moisture in the larger dead wood we call the thousand-hour fuels.[15] So, actually quite early this summer we knew we were going to have quite a serious year."[16]

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14 Burns Oral History, ; Fires in lodgepole forests of the Central and Upper Rockies were so rare during the early decades of Forest Service management as to give certain areas a reputation as almost unburnable, hence the reputation as "asbestos."

15 Thousand hour fuels are the heavier woody fuels, usually three inches in diameter or larger, which take 1000 hours to change the moisture content.

16 Burns Oral History,

Table 1. Percent of Normal Rainfall

in Yellowstone National Park.

	April	May	June	July	August
1977	10	96	63	195	163
1978	91	126	42	99	46
1979	6	17	42	115	151
1980	33	152	55	143	199
1981	49	176	102	103	25
1982	169	74	89	118	163
1983	22	29	69	269	121
1984	44	84	66	297	121
1985	42	93	44	160	84
1986	145	47	64	212	75
1987	42	144	72	303	122
1988	155	181	20	79	10

[17]

A pattern of dry winters followed by wet summers, which had become increasingly pronounced after the severe fire years of 1979 and 1981, was disrupted in 1988. Brian Stout, the articulate Forest Supervisor of the Bridger-Teton National Forest, noticed that in 1988 "storms all seemed to split and go north and south of us, and we did not get our normal weather patterns at all."[18] In the spring, a high-pressure system

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Yellowstone National Park, "The Yellowstone Fires: A Primer on the 1988 Fire Season," 7.

Stout Oral History, .

developed that split the jetstream, funneling it north and south, leaving the interior of the country dry. Early in the summer, meteorologists explained that while predicting the end of a drought was nearly impossible, "dry conditions reinforce the atmospheric patterns, and they change very slowly."[19]

Don Despain, biologist for Yellowstone National Park, recalled that the winter of 1987-1988 was dry. Some spring rains alleviated the situation, but "then in June it dried off and we didn't get any more moisture and we were having fires in late June which is normal. Some of them started and they were in places that appeared to be safe. And we allowed them to burn. And then . . . the summer rains didn't come at all."[20]

In comparing the severe fire years of 1979, 1981, and 1988, Despain, admitting that the scientific work had not been done, speculated that there could have been a cumulative effect of drought that contributed to the severe fire year of 1988. But even then the dryness of

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19 Irion, Robert. "There's No Relief in Sight; Midwest Faces 30 More Days of Scorching." Chicago Tribune 19 June 1988, Sec. 1, pp. 1, 13.

20 Conversation with Don Despain, December 14, 1988.

the thousand-hour fuels throughout the fire season was not appreciably different between 1981 and 1988. As Despain put it, the difference was that there "were twice as many days with rain in 1981 as there was in 1988 . . . . we didn't have a storm, even a thunderstorm come by and wet things down for a day. We had some but we didn't have enough." Furthermore, "the ones that did come were followed by warm, windy days that dried the fuels out. So, the storms didn't do as much good as they did in 1981. So, it will take awhile before we really find out what the differences were."[21]

That there were differences between the summer of 1988 and earlier fire years might not have been apparent early in the fire season, but the results of the differences would reveal themselves in time. With the thousand-hour fuels already dry, the high temperatures came in June together with 3 months that are arguably the driest ever experienced in the Yellowstone Area.

Conversation with Don Despain, December 14, 1988.

This amounted to the most critically extended period of high-temperature drought since the late 1880's.

Summer rains amounted to only 34 percent of the already sparse normal for the period--20 percent in June, 79 percent in July, and a devastating 10 percent of normal in the worst August on record. Only during the second week of September did storms end the siege of fire. Preliminary analysis of long-term precipitation data suggests that only five other 3-month periods approach this for drought during the past century. Of these, four fell in June, July, and August: 1889 at 41 percent of normal; 1903 at 41 percent; 1935 at 38 percent; and 1953 at 36 percent. A suggestively comparable drought occurred in 1979, when April with 6 percent of normal, May with 17 percent, and June with 42 percent were followed by late summer moisture well above normal.[22] Although 1979 was widely acknowledged as a bad fire year in the GYA, a contributing difference might have been the timing of the drought during a

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22 Diaz, Ninety-One Years of Weather Records at Yellowstone National Park, 1-16.

generally cooler period. Thus, it would seem that even a cursory examination of weather patterns supports the sense of resource managers that the period when "the summer rains didn't come" was indeed a major contributing factor in 1988's holocaust.

By late June it was evident that differences or peculiarities were not restricted to the GYA but were evident across the Nation. Soon water levels reached record lows on the Mississippi and other navigation routes, as rivers and shipping lanes were plugged by exposed sandbars. Agricultural crises hit 1,231 counties in 30 states, and already elevated anxiety was heightened by increasing reports that the hot, dry summer was a symptom of the greenhouse effect gone awry due to pollution of the atmosphere. If by mid-July it was becoming evident that established weather models were no longer useful as prediction tools, by late July national attention, heightened by other aspects of drought, focused on the fires of the GYA. This attention was a manifestation of the special place that Yellowstone has in American life as well as the peculiarities of the year and situation.

CHAPTER II

THE GREATER YELLOWSTONE AREA: AT THE HEART OF AMERICA

Beyond the physical immensity of the fires--a burn perimeter of 1.6 million acres--the Greater Yellowstone fires of 1988 constituted an important human event as well.[23] In part, this is because of the unique meaning and importance the Yellowstone region has, not only locally but nationally and internationally as well. Alfred Lambourne, a homesteader in the Rocky Mountain West in the late nineteenth century, put it well when he said that "under certain conditions, a place becomes a part of us; we own it. We absorb it into our lives. It cannot be taken from us. It is ours, and without title or deed."[24]

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23 For a complete discussion of acres burned see Greater Yellowstone Coordinating Committee, "The Greater Yellowstone Postfire Assessment," (March 1989).

24 Charles S. Peterson, "A Utah Moon," St. George Magazine (Summer 1986), 31-34, 91-98.

Yellowstone National Park and the surrounding area is such a place that people identify with and feel a part of. This feeling comes to those who live in the area, to those who visited it once or twice in their youth, or to those who have merely seen or heard of it and take comfort in its presence. However the bond is formed, Yellowstone is part of a common heritage, a symbol that evokes a sense of serenity among some among some, concern, and pride among others.

A Place of Heritage

To a degree this is a matter of nature and geography. The region stands at the roof of the continent from which great rivers rise and vast mountain ranges extend. Both figuratively and literally, the Greater Yellowstone Area is centered at the heart of interior America. Within the GYA rise the three great river systems of the West. Abraham Lincoln reflected the spirit of America's heartland when he spoke of the Mississippi River as the "father of the waters." Even more, the area that spawns those streams plays a nurturing role in the mind and heart of America. From

their headwaters in the Yellowstone region, the Colorado, the Columbia, and the Missouri start their courses toward the sea. The Colorado and the Columbia flow to the Pacific Ocean, while the Missouri finds its way to the Gulf of Mexico, their courses separated by the Continental Divide that winds northwest through the region, following the ridges of picturesque mountain ranges.[25]

Contributing to the GYA's profile are widely shared perceptions including such values as the out-of-doors, esthetic grandeur, activism, physical ruggedness, and spiritual renewal in nature as well as political and economic interests. All are factors that have played important roles in the formation of the American character.

The importance and value of the region was evident in 1988 in the interest in the GYA fires, but the recognition of the worth of the region is not limited to

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25 An excellent geographic description of the Yellowstone region is contained in Aubrey L. Haines, The Yellowstone Story (Boulder: Colorado Associated University Press, 1977), xvii-xx.; see also, William R. Keefer, The Geologic Story of Yellowstone National Park (Washington, D.C.: Government Printing Office, 1971).

recent times. To the native American, the region was highly prized. Powerful tribes such as the Crow and the Snake inhabited the region and often fought over resources. Sacajawea, a Shoshonean woman, was well acquainted with the upper Missouri and upper Yellowstone, and her knowledge and assistance wereinstrumental to the transcontinental trek of Lewis and Clark.[26]

A half-century before whites entered the region the Blackfoot were a potent presence in the region. They established powerful alliances that kept the fur trade and other elements of white encroachment largely at bay until the 1830's.[27] When mountain men found the Blackfoot hold on the region too strong, they gravitated south making the environs of the Salt Lake Valley and the "Snake River Country" the first far-west center of the American fur trade.[28]

Bernard DeVoto, ed., The Journals of Lewis and Clark (Boston: Houghton Mifflin Co., 1953), 135-458.

John C. Ewers, "Intertribal Warfare as the Precursor of Indian-White Warfare on the Northern Great Plains," Western Historical Quarterly 6 (October 1975): 403-404.

Dale Morgan, Jedediah Smith and the Opening of the West (Lincoln: University of Nebraska Press, 1953), 35-36.

As other areas increasingly became trapped out, the focus of the American fur trade was centered on the Yellowstone region. Jackson Hole and Pierre Hole (the Teton Valley) became favorite locations for fur-trading rendezvous, and, as time passed, stories of the magnificent natural features of the region began to circulate. The Grand Canyon of the Yellowstone, petrified forests, and a multitude of geologic features were described to varying degrees of accuracy. Often based on tall tales, a favorite entertainment of mountain men, descriptions of the area were not always credible. The stream that dropped so fast that it was heated by friction and the petrified forest where petrified birds perched on petrified trees were among the most outrageous.[29]

Scientific explorations were delayed because of the incredibility of these tales as well as a lingering danger from the Blackfoot alliance. Once explored, however, the value of the Yellowstone region was immediately recognized. Each year from 1869 through

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29 Haines, The Yellowstone Story, 52-59.

1872 experienced one or more scientific explorations, the most important of which was the 1871 Ferdinand Vandiveer Hayden survey. During this period, the attention of the Nation turned westward as the leaders of scientific surveys, such as John Wesley Powell, Clarence King, and Hayden, became prominent. They earned respect in the scientific community as well as winning eminent positions in national life as the country became enamored with hearing of the monuments of nature in the West.[30]

When the Hayden survey gave credibility to the claims of the wonderful geysers, mudpots, and hot pools in the Yellowstone region (along with discrediting the fallacious claims), the Nation took steps to recognize the value of such natural resources. The existence of awe-inspiring monuments of nature were an important source of American pride and nationalism as the Nation sought to claim distinctiveness and superiority over

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For a seminal work on the role of exploration and science see, William H. Goetzmann, Exploration and Empire: The Explorer and the Scientist in the Winning of the American West (New York: Alfred A. Knopf, 1966); Alfred Runte, National Parks: The American Experience 2nd ed. (Lincoln: University of Nebraska, 1987), 41-47.

Europe, where human monuments outmatched America's in grandeur and antiquity.[31] On March 1, 1872, the Yellowstone Act recognized the value of the Yellowstone region as both a natural resource and a national symbol by establishing Yellowstone National Park.[32]

Development of an Administrative Dynamic

Eight years earlier, Congress had taken action to preserve the natural wonders of Yosemite, but jurisdiction had been given to the State of California. Yellowstone was established when Idaho, Montana, and Wyoming were territories in an evolving political context that placed Yellowstone in the new and peculiar position of being a national resource rather than belonging to a state or combination of states. Despite great local significance, Yellowstone National Park was

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31 Runte, National Parks, 11-32.

32 John Ise, Our National Park Policy: A Critical History (Baltimore: Johns Hopkins Press, 1961), 17; 17 Stat. 32.

established as a national treasure, and thus it has remained.[33]

As the first national natural treasure, Yellowstone was also in the vanguard of the development of an administrative superstructure to manage reserved lands. Yellowstone National Park experienced an initial period of ineffectual civilian administration followed by management by the Army. In 1918, 2 years after its creation, the National Park Service assumed responsibility for the Park's direction. Yellowstone played an important role as the young bureau formed policy and methods in its mission to provide recreation and protection.[34] Similarly, the debate over the establishment and growth of Grand Teton National Park were important chapters in the history of choices for use of public land. Originally created in 1929, by 1950 Grand Teton National Park reached its present size through a combination of philanthropic endeavors and

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Runte, National Parks, 28-32.

Richard A. Bartlett, Yellowstone: A Wilderness Besieged (Tucson: The University of Tucson Press, 1985), 281-307.

executive and legislative action.[35] Both Parks are part of the Park Service's Rocky Mountain Region headquartered in Denver, Colorado.

The national forests of the GYA were also among the first established and played a similarly important role in the evolution of an administrative dynamic to manage publicly held natural resources. Nineteen years after the establishment of Yellowstone National Park, the National Forest Reserve Act of 1891 gave the president power to set aside forest reservations on any public lands wholly or in part covered with timber or undergrowth.[36] Yellowstone Park Forest Reserve--a thin strip running the full reach of the southern border of Yellowstone Park plus a sizable rectangle extending up the southern two-thirds of the eastern border, forming a disfigured lazy L--was the first reserve established. Much of it is now within the confines of

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35 For information on the establishment of Grand Teton National Park see, Robert W. Righter, Crucible for Conservation: The Struggle for Grand Teton National Park (Boulder: Colorado Associated University Press, 1982).

36 26 Stat. 1095; John Ise, Forest Policy (New Haven: Yale University Press, 1920), 109.

the Bridger-Teton and Shoshone National Forests.[37] Sharing many commonalities with the parks and having a strong emphasis on recreation, the resources of the national forests have historically been managed for multiple-use. Along with recreation and esthetic values, the national forests of the GYA have contributed grazing, timber, minerals, energy, and wildlife resources to the region's economy. Since the days of charismatic founder Gifford Pinchot, the lands managed by the Forest Service have been administered locally with a keen sensitivity to local constituencies.[38] Even so, the national forest units of the GYA are divided among three Regions. The Beaverhead, Custer, and Gallatin are under the administration of the Northern Region (Region 1) headquartered in Missoula, Montana. The Bridger-Teton and Targhee are in the Intermountain Region (Region 4) centered in Ogden, Utah,

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Thomas G. Alexander, "The Rise of Multiple-Use Management in the Intermountain West: A History of Region 4 of the Forest Service," Washington, D.C.: U.S. Department of Agriculture-Forest Service, FS-399, May 1987, 33; Harold K. Steen, The U.S. Forest Service: A History (Seattle: University of Washington, 1976), 27.

Charles S. Peterson and Linda E. Speth, "A History of the Wasatch-Cache National Forest," Report for the Wasatch-Cache National Forest, 1980, pp. 82-83.

while the Shoshone is part of the Rocky Mountain Region (Region 2) located in Denver, Colorado.

The number of units and bodies of regional administration that come together in the Yellowstone region is indicative of the many overlapping jurisdictions in the area. Included are the two national parks, one National Park Service region, six national forests, three Forest Service regions, three states, and all or part of 12 counties.[39] The multiplicity of jurisdictions along with a variety of interested publics and special interests create an administrative dynamic that is complex and intricate. Tourism that centers around the parks and forests of the GYA is intrinsic to the subsistence of gateway communities. Local economic interest and environmental interest, along with a constituency that has national and even international dimensions, are served primarily by two agencies--the Forest Service and the National Park Service. Each Agency in turn had the opportunity

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39 The Greater Yellowstone Coordinating Committee, The Greater Yellowstone Area: An Aggregation of National Park and National Forest Management Plans (1987), 1: 1. Hereafter cited as The GYA: An Aggregation of Plans.

and necessity to coordinate and cooperate with the various other government jurisdictions.

Thus the fires of 1988 as a crisis necessitated a degree of collaboration in an area of many jurisdictions, deep-seated values, overlapping constituencies, and multiple uses that is unparalleled in the history of the Park Service and the Forest Service. Clearly the GYA fires were and continue to be a benchmark where managers and the public at large evaluate philosophy, policy, and methods of land and resource management.

CHAPTER III

FIRE POLICY IN THE CONTEXT OF THE NORTHERN ROCKIES

That a complex of fires in the Northern Rockies captured the attention of the general populace as well as those concerned with resource management is not without historical precedent. Forests in the Northern Rockies were often characterized as "asbestos forests" because of infrequent occurrence of fire. Despite this label, historic wildfires in the Northern Rockies have been at the forefront in forming attitudes toward fire in government agencies and the public consciousness. Yet, removed from historical context, the idea that the Northern Rockies have been important in forming attitudes toward fire and fire policy seems unwarranted. Compared with other regions, the fire load in the Northern Rockies is low, the value of timber for

logging is not high, and forests are more remote.[40] But wildfires occur in a place in time and, depending upon that historical context, take on differing degrees of significance in human perception and in the evolution of practices and policy. It is in the historical context that the fires of 1988 can best be understood.

Fires of 1910

Fire was a major impetus for management in the decades after the reservation of lands from the public domain by Acts such as the Yellowstone Act and the National Forest Reserve Act of 1891.[41] The failure of civilian superintendents to control fire was a major argument for Army management of Yellowstone Park. With the military came resources and organizational infrastructure to aggressively manage the

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However, in the last few decades there has been an increase in urban/wildland interface. See U.S. Department of Agriculture, Forest Service, Intermountain Region, Protecting People and Homes From Wildfire in the Interior West: Proceedings of the Symposium and Workshop (Ogden, UT: 1988).

John Ise, Our National Park Policy, 17; 17 Stat. 32; and 26 Stat. 1095; John Ise, Forest Policy, 109.

Park--including fire control.[42] Soon after the transfer of the forest reserves to the Department of Agriculture in 1905, Gifford Pinchot wrote in the Use Book of regulations and instructions that the "greatest single benefit derived by the community and the nation from National Forests is through the protection of property, timber resources, and water supply against fire." Pinchot further asserted that "through its fire patrol the Forest Service undertakes to guard the property of the resident settler and miner, and to preserve the timber, water and range upon which the prosperity of all industries depends."[43]

By the summer of 1910, the Forest Service had cared for the national forests for 5 years, yet it was not an inevitable conclusion that for the next 50-plus years federal land management agencies' relationship with wildfire would be an adversarial one. In 1910 events provided a backdrop to a summer holocaust in Montana and

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42 H. Duane Hampton, How the U.S. Cavalry Saved Our National Parks (Bloomington: Indiana University Press, 1971), 82-83.

43 U.S. Department of Agriculture, Gifford Pinchot, The Use Book: Regulations and Instructions for the use of the National Forests (Washington: Government Printing Office, 1907), 125.

Idaho that crystallized utilitarian conservation values and affected attitudes toward fire for years to come.

In 1908, with the support of the incumbent Theodore Roosevelt, a close personal friend of Pinchot's, William H. Taft had been elected president. Early in his administration Taft replaced Secretary of Interior James A. Garfield with Richard A. Ballinger. Pinchot had enjoyed a close working relationship with Garfield but quickly found that he clashed personally and politically with Secretary Ballinger. The two became heated political enemies and, after several scandals, Taft resolved the matter by seeking Pinchot's resignation. Pinchot tendered his resignation on January 7, 1910, leaving the Forest Service without his energetic and capable leadership while it was still in the throes of a conflict with the Department of Interior.[44]

As the Pinchot-Ballinger controversy raged in the executive branch the legislative branch debated the Weeks Bill which would allow for the purchase of private

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Samuel Trask Dana, Forest and Range Policy: Its Development in the United States (New York: McGraw-Hill Book Co., 1956), 167-170; Steen, Forest Service, 101-102.

lands in the East to be added to the National Forest System. The initiative bounced from House to House, but, due primarily to Western opposition, it did not receive the support necessary to become law. The Weeks Bill presented an important precedent. The Yellowstone Act and the Forest Reserve Act had modified the longstanding policy of disposal of public lands and provided for retention and management of portions of what had been public domain. The Weeks Bill proposed to take this trend a step further by allowing for acquisition of private lands to be added to federally-managed lands. The opposition was primarily conservative, rejecting the growth of federal powers and even pushing their case as far as stating that the management of any of the forests was the prerogative of the states and not the proper function of the federal government.[45]

As the role of the federal government in managing forested lands was debated, so too was the issue of fire

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45 John James Little, "The 1910 Forest Fires in Montana and Idaho: Their Impact on Federal and State Legislation," (MS thesis, University of Montana, 1968), 78-96.

on forested lands. Frontier practices had long included "light-burning"--the frequent purposeful burning of forests in hope of preventing the infrequent but intense large fire. In the August 1910 issue of Sunset, this practice (purposeful burning) was publicized as an acceptable fire control method and even presented as a means so effective that it should be mandatory.[46]

It is within this context that the 1910 fires assumed great importance for the future of agency and public attitudes toward fire and attendant policy. Removed from this setting, the influence of the 1910 fires may well have been greatly reduced. But the 1910 fires did occur in combination with circumstances previously mentioned, and they did play a preponderant role in the development of institutional responses to wildland fire for decades to come.[47]

It was a dry year. As early as March, uncommonly high temperatures and exceptionally low amounts of

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G.L. Hoxie, "How Fire Helps Forestry," Sunset 44 (August 1910): 145-151; Stephen J. Pyne, Fire in America: A Cultural History of Wildland and Rural Fire (Princeton, NJ: Princeton University Press, 1982), 103.

Pyne, Fire in America, 239-241.

precipitation were recorded. On April 29, the Blackfeet National Forest of northwestern Montana recorded the first fire of the 1910 season. By the end of June, fires were reported on every forest in the region. By July, District Forester William Greeley, later to become the third Chief of the Forest Service, was enacting new policies to facilitate recruiting labor to battle the fires which had spread to many fronts. The number of personnel employed by the Forest Service increased more than ever as a veritable army was put on the fire fronts.[48]

By the end of July, Greeley was optimistic about the suppression effort:

> We are holding our own against all the fires within the jurisdiction of field district no. 1, and the outlook today is that we can continue to hold the flames in check and protect most of the commercial timber on the reserves indefinitely. While a big general rain is anxiously desired, still I have no hesitation in saying that the situation is well in hand, and that we fear no heavy losses further than have already resulted.[49]

However, as events unfolded, it became apparent that Greeley's hoped-for rain was not forthcoming and his optimism was unfounded. New fires erupted during the

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[18] Little, "The 1910 Forest Fires," 23-31.

[19] Little, "The 1910 Forest Fires," 31.

first week of August and spread rapidly, aided by strong winds, an omen of still worse events to come.

August 20, 1910, a gale of hurricane magnitude swept throughout northern Idaho and western Montana uprooting trees, driving fire at an incredible rate, and endangering firefighters.[50] Towns were evacuated, heroic acts preserved lives,[51] but tragically, many lives were lost.

Before it was over, the summer of 1910 witnessed the burning of 5 million acres nationally, 3 million of which were in Montana and Idaho. Many of those acres burned in a 2-day windstorm of tremendous violence and energy. The holocaust fueled the Forest Service's determination that conservation meant protection from such destructive natural events. This determination saw the agency through its bureaucratic battles with Interior in the aftermath of Pinchot's dismissal. It also helped the agency battle proponents of a fire policy other than full suppression.

The fury of the 1910 fires also melted opposition to the Weeks Bill among western members of Congress. The Weeks Act cleared Congress and was signed by the President early in 1911. Corresponding with plans made before 1910, the Act provided for the purchase of lands to preserve navigability of streams and established the right of states to enter into compacts to conserve forests and water supply. But more directly associated to the afterglow of the tremendous fires, the Act appropriated funds for the Department of Agriculture to cooperate with states "in the organization and maintenance of a system of fire protection on any private or state forested lands."[52] This effectively ensured that fire control would be nationalized under the aegis of the Forest Service. The first historian of the 1910 fires, Elers Koch, was not being rash when he concluded: "The 1910 forest fires in the Northern Rocky Mountain Region is an episode which has had much to do with the shaping of fire policy not only in that region but the whole United States."[53]

The most famous heroic act was that of Edward C. Pulaski, who led his men through swirling smoke and ashes to an abandoned mine shaft. A firefighting tool resembling a mixture of a grubbing hoe and an axe now bears his name.

Pyne, Fire in America, 243-244, 246-247.

U.S. Department of Agriculture, The Use Book, 10-11; Little, "The 1910 Forest Fires," 95.

Pyne, Fire in America, 239.

The 10 A.M. Policy

Twenty-four years after the 1910 fires the Selway fires continued in the tradition of the Northern Rockies. Many aspects of the historical context of the Selway fires display instructive analogies when compared to the background of the 1910 fires. The Forest Service was clearly still the dominant force in shaping the agenda of fire control, but its position as the premier land managing agency was in doubt. The National Park Service had been created in 1916 and immediately established itself as a contender to administer some of the lands previously managed by the Forest Service.[54] In 1934, not long before the Selway fires, Congress passed the Taylor Grazing Act which provided for the formation of the Grazing Service, the forerunner to the Bureau of Land Management. While not as overt as the competition fostered by the Pinchot-Ballinger

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54 For evidences of interagency competition see, Robert W. Righter, Crucible for Conservation; Hal Rothman, "'A Regular Ding-Dong Fight': Agency Culture and Evolution in the NPS-USFS Dispute, 1916-1937," Western Historical Quarterly 20 (May 1989):141-161. Hal Rothman, The American National Monuments: Preserving Different Pasts (Chicago: University of Illinois Press, 1989), 140-161.

controversy, the existence of agencies in different departments with missions that often overlapped frequently produced tensions.[55]

Foresters from the South and from California renewed the debate about light-burning throughout the late 1920's and early 1930's, but in 1934 the debate was overshadowed by the 250,000 acres burned in the Northern Rockies.[56]

If agency rivalry and challenges from advocates of light-burning to establish fire control policy are themes shared between the Selway fires and the fires of 1910, availability of manpower was not. By 1934, the country was in the throes of depression and, in an effort to stimulate the country through the funding of federal projects, President Franklin D. Roosevelt's New Deal created vast pools of labor accessible to conservation agencies. The increased work force made it possible for agencies to attempt projects in all areas

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Steen, Forest Service, 239.

Pyne, Fire in America, 240.

of management which previously would have been inconceivable; the same held true in fire control.

The review of the Selway fires became the forum for a larger debate on the philosophy of fire control. Before the implementation of New Deal programs such as the Civilian Conservation Corps and Works Progress Administration, there was considerable support within the Forest Service for suppression efforts commensurate with economic costs and practicality of success. In the aftermath of the Selway fires, the programs of the New Deal, and the Forest Service's need for a clearly defined policy in the face of interagency rivalry, the 10 A.M. Policy emerged.

The 10 A.M. Policy called for "fast, energetic and thorough suppression of all fires in all locations during possibly dangerous fire weather . . . with the aim of obtaining control before 10 o'clock of the next morning."[57] This meant to plan to control a fire by 10 a.m. the day after it was reported and, if it should

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57 David D. Devet, "Descon: Utilizing Benign Wildfires to Achieve Land Management Objectives," Tall Timbers Fire Ecology Conference and Fire and Land Management Symposium, October 8-10, 1974, Proceedings (Tallahassee, FL: Tall Timbers Research Station, 1976), 14: 35.

escape control, to plan to control it by 10 a.m. the next day, and so on. The policy reflected a "keep every acre green" philosophy that was clean and clear cut. Fires were to be put out and put out quickly with whatever resources were available. For the first time, firefighting was standardized and, perhaps more important, the policy came to represent the Forest Service's attitude toward fire and its fire control duty.[58]

The 10 A.M. Policy, in part an effort to simplify on-the-ground fire suppression decisions, established the philosophy of aggressive initial attack that became the standard, not only in the Forest Service but in fire control forces everywhere for the generation to come.[59]

Pyne, Fire In America, 277-284.

James E. Lotan, "Fire Management Perspective: USDA Forest Service," Western Wildlands 4 (Summer 1977): 10; Pyne, Fire in America, 296.

Recent Policy Changes

The fires of 1910 and the Selway fires proved to be occasions that sparked interest in the management, with particular attention to fire, of certain Federal lands. Gary Cargill, Region 1's clear-thinking Regional Forester whose 3 decades in the Forest Service have included many fire-related assignments including a stint as Director of Fire and Aviation Management in the Washington Office, noted that "it takes an event to change public attitude, change public perception." Pursuing his point he declared, "Heretofore when a fire management plan would be talked about it drew very little interest, very little comment. In fact the Yellowstone Park plan drew very little comment or interest. People simply didn't see it as something that affected them."[60]

The GYA fires of 1988 brought public interest to fire management policy which, under normal

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60 Cargill Oral History, .

circumstances, was lacking. Like the fires of 1910 and the Selway fires before it, the event translated fire policy from the realm of the theoretical, technically distant and incomprehensible to something that was simple and threateningly near. Natural events act as flashpoints where values, philosophies, policies, and methods of management are brought to the forefront to be judged and measured. Commenting on how the customary lack of attention to fire policy had been changed by the fires, Cargill said: "I don't think that will be the case for the next several years. I think the public will have a high level of interest in what we do."

Part of that "high level of interest" and a facet that figures large in the context of the 1988 fires was a change in the philosophy of fire management that has been developing for several decades between both agencies, and that was written into policy in 1968 for the Park Service and 1978 for the Forest Service.[61]

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1 U.S. Department of Agriculture, Forest Service, Forest Service Manual (Washington, D.C.: Government Printing Office, 1978) Title 5100; U.S. Department of Interior, National Park Service, Administrative Policies For Natural Areas of the National Park System (Washington, D.C.: Government Printing Office, 1968, and 1970 (revised)), 17-18.

In the 1974 Intermountain Fire Research Council's Fire and Land Management Symposium, Bruce M. Kilgore, then Associate Regional Director of the National Park Service's Western Region, remembered a 1951 zoology class field trip in which he heard Dr. A. Starker Leopold tell his students that it would not be long before fire would be restored to the national parks. Kilgore noted that it seemed a "startling and revolutionary idea at the time."[62] At the same symposium, Henry W. DeBruin, the Forest Service's Director of Fire and Aviation Management, commented on a major change affecting his agency. He remarked that the Forest Service and other land management agencies were "changing from FIRE CONTROL, a simplistic approach, easily communicated and understood, to FIRE MANAGEMENT, a complex scientific approach, not so easily communicated or understood."[63]

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62 Bruce M. Kilgore, "Fire Management in the National Parks: An Overview," in Tall Timbers Fire Ecology Conference and Fire and Land Management Symposium, October 8-10, 1974, Proceedings (Tallahassee, FL: Tall Timbers Research Station, 1976), 14: 45.

63 Henry W. DeBruin, "From Fire Control to Fire Management," in Tall Timbers Fire Ecology Conference and Fire and Land Management Symposium, October 8-10, 1974, Proceedings (Tallahassee, FL: Tall Timbers Research Station, 1976), 14: 14.

In light of the many decades of the 10 A.M. Policy, fire management was indeed revolutionary and even difficult to understand in all its many countenances. Compared to a simple aggressive attack fire management was a hydra with many heads going in different directions. Fire management includes many possibilities ranging from traditional fire control to prescribed natural fire. In the parlance of nuclear strategists, the "startling and revolutionary idea" of an alternative to aggressive initial attack represented a transition from massive retaliation to flexible response.

In 1963, an influential report, Wildlife Management in the National Parks, commonly referred to as the "Leopold Report" after A. Starker Leopold, chairman of Secretary of Interior Stewart Udall's advisory board, called attention to the importance of fire as a natural process and its value as a tool to manage for desired vegetative conditions. By 1968, the Park Service implemented the suggestions of the Leopold report into park policy.[64] This policy stated that "fires in

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64 Runte, National Parks, 205.

vegetation resulting from natural causes are recognized as natural phenomena and may be allowed to run their course when such burning can be contained within predetermined fire management units and when such burning will contribute to the accomplishment of approved vegetation and/or wildlife management objectives."[65] The policy also explained that prescribed burning could substitute for natural fire to achieve approved ends.

By 1972, many parks managed as natural areas such as Yellowstone, Grand Teton, Everglades, Sequoia and Kings Canyon, and Yosemite had fire management plans that elevated fire management from the merely experimental to established programs. The policy was enacted with some trepidation and concern for support from a public that had grown up with the potent moral message of Smokey the Bear. But in the context of growing knowledge and awareness of ecology[66] and the 1964 Wilderness Act as

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65 U.S. Department of Interior-National Park Service, Administrative Policies for Natural Areas, 17.

66 Fire ecology conferences organized by the Tall Timbers Research Station in Florida from 1962-1975 served as an important clearing house for research on fire ecology. The conferences also functioned as a forum for fire

a manifestation of public will that certain areas should be managed for "the preservation of their wilderness character," it was evident that a change in the emphasis of fire policy was needed.

The 1964 Wilderness Act presented the Forest Service with the same opportunity to reevaluate its fire policy. Fire control had been seen as one of its central missions since the establishment of the Forest Service in 1905. By 1964, the agency had functioned under the 10 A.M. Policy of initial aggressive attack on all fires for close to 3 decades. A shift in emphasis would take time. In 1971, the Forest Service underwent an extensive planning effort that focused on the net effect of fire. It was a realization that the effects of fire were not all bad nor all good. There was a concerted effort to develop ways of assessing values at risk. It was decided that fire policy would no longer simply consist of fire control but that it would incorporate more aspects, including a recognition of the

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policy. Tall Timbers Fire Ecology Conference Proceedings (Tallahassee, FL: Tall Timbers Research Station, 1962-1975).

ecological role of fire, into a broader philosophy of fire management.[67]

The emerging aim of fire management was to view fire as a part of total land management. By 1974, the methods of fire management included fire control, fuel management, fire prevention, and even limited experiments in prescribed burning, both natural and man-set. Nevertheless, all Forest Service efforts at prescribed burning were initially exceptions that required the explicit approval of the Chief of the Forest Service. Later, the authority was delegated to the concerned Regional Forester.[68]

From 1971 to 1977, the cost of fire control increased steadily. Gary Cargill, Regional Forester of the Rocky Mountain Region, explained that the Forest Service "seemed to be stuck at about a 98 percent initial attack success and it didn't seem to matter how much money was budgeted, we couldn't assure ourselves that we were going to get that last 2 percent which was

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67 Cargill Oral History, -.

68 DeBruin, "From Fire Control to Fire Management," Tall Timbers, 14: 11-17; Cargill Oral History, .

causing about 90 percent of the losses." As this fact became more evident and the Office of Management and Budget and Congress became aware of it, there were those who wondered if the Forest Service was trying to accomplish the unattainable through the financing of fire organizations.[69]

Because of spiraling costs without appreciable improvement in fire control and the need for an increased role for fire in wilderness areas, Henry DeBruin, national Director of Fire and Aviation Management, started a planning process to restate the policy to allow prescribed fire as a matter of policy rather than a matter of exception. When the policy was finalized and included in the 1978 Forest Service Manual, it represented the first Servicewide shift in Forest Service fire policy since the 1935 10 A.M. Policy of universal aggressive initial attack was implemented.[70]

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69 Cargill Oral History,

0 U.S. Department of Agriculture-Forest Service, Forest Service Manual, Title 5100;

Thus, by the decade's end, the Park Service and the Forest Service had broadened the scope of fire management policy to include the aggressive suppression of fire, the use of fire as a tool, and fire as a natural process or a combination of all three, depending upon given variables. Essentially, this adaptive policy was still dominant in both agencies as the fire season of 1988 approached. While land management objectives of fire management differ on portions of national forests managed for multiple-use, the objectives set forth in fire management plans for the natural areas of the national parks' and national forests' wilderness areas of the GYA are similar. They declare the intent to interfere with the "natural forces of fire, insects, disease, [and] water" only to the extent ". . . needed to protect human life or property."[71]

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71 U.S. Department of Agriculture-Forest Service, Intermountain Region, Bridger-Teton National Forest, "Teton Wilderness Fire Management Area Plan," (Jackson, WY: 1981), 1. Hereafter cited as "Teton Wilderness Fire Management Area Plan;" see also, Yellowstone National Park, "Wildland Fire Management Plan for Yellowstone National Park," (Mammoth, WY: 1986), 2. Hereafter cited as "Wildland Fire Management Plan for Yellowstone National Park."

The fire management objectives of wildernesses and park natural areas share commonalities. They also share borders as do multiple-use areas of the national forests with the national parks. This situation presented the opportunity and necessity for coordination between natural resource management agencies, particularly the Forest Service and the National Park Service. It was a necessity heightened in the crisis of the 1988 GYA fires.

CHAPTER IV

GREATER YELLOWSTONE COORDINATING COMMITTEE

Since the establishment of the first forest reserves around Yellowstone National Park in the 1890's, the lands that are now known as the Greater Yellowstone Area have shared important characteristics. While the geological wonders of Yellowstone National Park stand apart and the missions of the Forest Service and the National Park Service are different, the lands of the GYA are managed for many of the same purposes. The National Park Service manages for preservation, public enjoyment, and the function of natural processes. The Forest Service manages for the multiple uses of recreation, grazing, wildlife, mining, fossil fuels, watershed, timber, and wilderness.[72] In the GYA, management of the national forests emphasizes recreation, wildlife, watershed and wilderness values,

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72 The GYA: An Aggregation of Plans, 1: 1.

uses that do not differ essentially from the purposes of the parks.

Shared Resources and Common Goals

GYA lands managed by the Park Service and the Forest Service share more than common goals. They share watersheds, animal populations, a myriad of complex relationships between flora and fauna and overlapping constituencies. Shared resources and shared purposes and efforts to coordinate management of those resources have resulted in the formation of the Greater Yellowstone Coordinating Committee (GYCC). The GYCC is composed of the supervisors of the six national forests--the Beaverhead, Bridger-Teton, Custer, Gallatin, Shoshone, and Targhee--the superintendents of Grand Teton National Park and Yellowstone National Park, the regional foresters of the Forest Service's Rocky Mountain, Intermountain, and Northern Regions, and the

Park Service's regional director of the Rocky Mountain Region.[73]

In September 1986, a Memorandum of Understanding was signed between the Rocky Mountain Region of the National Park Service and the Northern, Rocky Mountain, and Intermountain Regions of the Forest Service, declaring the intention to "reinforce existing coordination mechanisms" such as the GYCC.[74] Stan Tixier, Regional Forester for the Intermountain Region, commented that while the formal establishment of the GYCC was recent, managers of what is now designated as the GYA "had been meeting and coordinating and discussing the responsibilities in managing those different units of land in the public interests since the late 1950's, early 1960's." Expression of public concern about management of the Yellowstone region as an entity, noted Tixier, was a more recent development.[75]

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73 The GYA: An Aggregation of Plans, vii.

74 The GYA: An Aggregation of Plans, Appendix A, Memorandum of Understanding between the Rocky Mountain Region, National Park Service and The Northern, Rocky Mountain, and Intermountain Regions, Forest Service.

75 Tixier Oral History, .

Thus, while the GYCC itself is a new arrangement, an administrative dynamic for coordination has existed and evolved for years because of shared resources and common goals. The early history of the Forest Service and National Park Service in the area and the Nation at large was not always harmonious.[76] Wichita State University historian Hal Rothman has argued that sharp interagency conflict in the early decades after the establishment of the National Park Service in 1916 was not due to differences in missions and goals, rather it was an evidence of the similarity of the two agencies.[77] The commonalities of the National Park Service and the Forest Service brought conflict over which agency was best suited to manage certain lands. An excellent example of this is found in the establishment of Grand Teton National Park.[78]

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76 For evidences of interagency competition see, Robert W. Righter, Crucible for Conservation; and Hal Rothman, The American National Monuments, 140-161.

77 Rothman, "'A Regular Ding-Dong Fight'," 141-161.

78 See generally, Righter, Crucible for Conservation.

In the 1920's, the young and growing National Park Service established that certain lands in the National Forest System were better suited for management by the National Park Service. In an attempt to ease increasingly bitter debate about boundaries and areas of control, the Coordinating Commission on National Parks and Forests was created by the President's Committee on Outdoor Recreation as early as 1925.[79] The area surrounding the Teton Range and Jackson Hole became the focus of one such debate. Both sides presented justification for management by their agency, but in the end the Coordinating Commission compromised and suggested that most of the lands surrounding the Teton Range remain under Forest Service management, with the Park Service managing a newly-created park extending a short distance from the immediate slope of the range on either side. In terse words, national parks historian John Ise described Grand Teton National Park as created in 1929 as "a stingy, skimpy, niggardly little park of

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79 Righter, Crucible for Conservation, 35.

only about 150 square miles, from three to nine miles wide and twenty-seven miles long . . ." [80]

Areas of interagency conflict continued through the early 1940's and to a lesser degree until 1950 when the Grand Teton National Park was enlarged to its present configuration through a process of philanthropic, legislative, and executive action. The actions of subordinates caused some particularly difficult problems for Regional Forester Clarence N. Woods to smooth over. The transfer of national forest lands to the National Park Service in 1943 included the Jackson Lake Ranger Station. Forest Service employees took a liberal view of "movable objects" when vacating the station. When they left they took with them nearly everything--including the kitchen sink, plumbing, and buried tanks.[81]

Yet despite some early friction, as Tixier pointed out, an administrative dynamic for coordination and cooperation continued to develop throughout the 1950's

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80 Ise, Our National Park Policy, 329.

81 Righter, Crucible for Conservation, 121.

and 1960's. Road and trail maintenance, standards for outfitters and guides, and protection of endangered species were examples of coordination between the managers of the GYA units that had existed for several decades.[82] Echoing Tixier, Lorraine Mintzmyer, Denver-based Regional Director of the Park Service's Rocky Mountain Region, reaffirmed that "the GYCC was an evolution of interagency cooperation that has been in existence for many years," but added that cooperation came to a "more concentrated basis as a result of the hearings on the Yellowstone area that took place in front of Congress." As Mintzmyer explained, the October 1985 hearings were held as a result of pressures to "see if there weren't some way that . . ." the managers of the Greater Yellowstone Area "could deal with better overall management of a large geographic area. . ."[83]

Opportunity for Heightened Coordination

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82 Tixier Oral History, ,

83 Mintzmyer Oral History,

The "Greater Yellowstone Ecosystem" joint hearing held in October 1985 by the Subcommittee on Public Lands and the Subcommittee on National Parks and Recreation, chaired respectively by John F. Seiberling and Bruce F. Vento, heard testimony from 38 organizations and government entities.[84] An outgrowth of the hearing, as Tixier indicated, was that "the Chief of the Forest Service" and "the Director of the Park Service agreed that we would step up our coordination efforts." Furthermore, it was agreed that efforts would be made to "display" this cooperation "better to the public and to ourselves."[85] To achieve both goals of improved coordination and public display, the GYCC immediately devised a two-phase process. The first involved the creation of an aggregation of national park and national forest management plans in the GYA to facilitate the identification of areas where differences existed and where coordination could be improved. The second phase

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84 Committee on Interior and Insular Affairs U.S. House of Representatives, 99th congress, 2d Session, Committee Print No. 6, "Greater Yellowstone Ecosystem," ((Washington, D.C.: Government Printing Office, 1987), 4-10.

85 Tixier Oral History, .

was to take those issues identified in Phase One and improve and strengthen coordination in those areas. Mintzmyer stated that the GYCC was "the first major interagency management that has really occurred in this country on this scale." Smaller issue-related coordination might have existed earlier but the GYCC was unique in its efforts to provide an area-wide coordination on all aspects of planning and management.[86]

Published by the GYCC in September 1987, less than 9 months before the ignitions of fires that would focus intense interest on management practices of the Forest Service and Park Service, The Greater Yellowstone Area: An Aggregation of National Park and National Forest Management Plans represented the completion of what is known as Phase One in this process. Designed as a tool to identify areas where increased coordination would be beneficial, the Aggregation pointed to a number of important correlation opportunities in fire

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86 Mintzmyer Oral History,

management.[87] Gary Cargill asserted that, through the process of putting together the aggregated management plans, a recognition emerged of important "problems in fire management direction amoung the park and the forests and between the forests" themselves.[88] Coordination opportunities included ensuring that each unit's fire suppression strategies were compatible with management objectives of adjacent units and seeing that "fire suppression strategies on any one unit do not present undue risk of fire to resources of other units."[89] But flames engulfed the Greater Yellowstone area before the steps of Phase Two could be taken. As Cargill put it, they soon "knew we had a problem. We planned to address the problem. . . . [but] we didn't get the chance to correct that prior to the 1988 fire season."[90] Tixier agreed, noting that Phase One had identified the opportunities for correlation but "before

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The GYA: An Aggregation of Plans, 3: 90.

Cargill Oral History, .

The GYA: An Aggregation of Plans, 3: 90.

Cargill Oral History, .

we could get onto Phase Two, why the summer of 1988 arrived . . . [and it] was just really too early to have an improved level of coordination in fire management in place when the fire season, this historic fire season hit." Tixier lamented that "if we could have postponed the '88 fire season another year until we had a chance through our followup Phase Two improved coordination efforts, we would have probably been in better shape to deal with the '88 fire season."[91]

Familiarity: People and Geography

Nonetheless, most managers of the GYA agreed that the Greater Yellowstone Coordinating Committee played a crucial role in the fire suppression effort during the summer of fire. For example, Cargill thought that the GYCC "served a valuable coordination function." In part this was due to the familiarity brought by working on the Aggregation and the frequent meetings the managers had on GYCC business before the historic fire season. Referring to the ability of managers to work together

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91 Tixier Oral History,

during the summer of 1988, Cargill noted that "we already had the mating dances over. We could call a meeting and we knew who was going to come, how to behave and how to act and work together. I think that worked pretty darned well."[92]

As important as the administrative and personal familiarity, coordination on GYCC issues brought managers an increased awareness of the geography of the GYA, or, as Supervisor John Burns put it, "knowing the country." The 1988 fires necessitated the movement of resources over a vast area. An intimate knowledge of the total area was essential for managers who set priorities and oversaw the movement of supplies across the full expanse of the Yellowstone area, not only their own unit. Speaking of the managers of the GYA, Burns noted that "all of us have been all over it cause we had our meetings in different places and we have other activities such as coordination trips in the field. I've ridden horseback across the Madison Plateau with the National Park people . . . ." and "each year we have

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2 Cargill Oral History, .

a trip with Teton Park personnel. Part of the time they're on us and part of the time we're on them. So, it's that familiarity with the country and conditions that's a big help too, not just the people."[93]

To assist improvement on areas recognized by the Phase I Aggregation, the GYCC recognized a need for a staff position to facilitate the Phase II process of strengthening areas of weak coordination. "Near the beginning of June," explained Jack Troyer, the Committee "created a staff position called the GYA team leader and I began to serve in that position. . . ."[94] As the summer unfolded, it became apparent that the team leader position filled by Troyer was a great benefit in the coordination of the gigantic suppression effort.

The GYCC played an important role in setting the ground work for an effective and coordinated fire suppression effort. But in the view of some of the managers of the GYA, the Committee as an entity played only a minor role in the suppression effort.

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93 Burns Oral History, .

94 Conversation with Jack Troyer, August 24, 1989.

Yellowstone National Park Superintendent Bob Barbee asserted that "the Coordinating Committee is not set up to deal with something like this . . . it's a bunch of loose knit . . . managers and executives that have dedicated themselves to coming together to focus on mutual problems . . ." in a setting where "they can be deliberated upon, and worked out in an atmosphere of relative calm." The GYCC's purpose was to safeguard the integrity of the entire GYA by coordination on a variety of issues through processes like the compilation of the Aggregation and the planned Phase Two, "but the Greater Yellowstone Coordinating Committee . . .," asserted Barbee, was not "set up to deal with a crisis like this. And as far as I'm concerned, it didn't function that way."[95]

The Greater Yellowstone Coordinating Committee as a term has been used in two different contexts that are similar but have subtle yet important differences. On the one hand, GYCC is used as a specific administrative structure whereby a definite set of managers--the

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95 Conversation with Bob Barbee, December 15, 1988.

various managers of the GYA--meet to work on GYCC coordination projects. On the other hand, the Greater Yellowstone Coordinating Committee is also used as a term for the managers of the GYA as a body but not necessarily called together on specific coordination efforts. Thus, the one use indicates a precise organization established after the "Greater Yellowstone Ecosystem" hearings. The other reflects a new name for an administrative dynamic of coordination and cooperation that has existed for decades in the GYA. If the GYCC as a specific process and administrative structure had not been established as an organization to deal with crisis, the GYCC as an informal group of managers accustomed to working together on shared issues played an integral role in the massive suppression effort. Whatever the nature of the GYCC, the fire year of 1988 proved to be an administrative crucible testing the character of its organization. In part, this was true because no one anticipated the magnitude of the fires or the burden of the strain they would place on human organizations.

CHAPTER V

EXPECTATIONS OF FIRE

In the past, the forests of the Northern Rockies, especially lodgepole pine forests, have been labeled as asbestos forests because of their resistance to fire. This term, however, seemed ill-applied during the summer of '88 as vast stands of lodgepole burned with high intensity. Before the fire season of 1988, the experience of Research Biologist Don Despain, whose 17 years in the Park coincide with the 17 years of Yellowstone's fire management program, generally seemed to confirm the asbestos properties of the forests of the GYA--at least when compared to the holocaust of 1988. When Despain came to the Park in the winter of 1971, he helped develop Yellowstone's first "Wildland Fire Management Plan." During the first year, only two fires burned inside the 300,000-acre fire management unit (FMU) where natural prescribed fires were allowed under

certain conditions. One went out before Despain could observe it, and the other burned out 10 or 15 feet. Only one log burned and Despain remembered that "it felt rather strange to go there in a helicopter, trace down the smoke and find the fire, take out a tape measure and measure how long and how wide it was and walk back up to the helicopter, fly off and leave it smoking there."[96]

Certainly the two meager fires of the fire management plan's initial year did not herald intense fire behavior or augur the likelihood of high fire frequency. Although the forests of Yellowstone indeed seemed flame resistant in normal years, Yellowstone National Park's wildland fire management plan recognized that "fires tend either to burn very small areas or to evolve into high-intensity crown fires."[97] Fire in the Park was episodic and occurred in unusually dry seasons where the bulk of natural burning resulted from a small number of fires that became large. A very small percentage of ignitions were responsible for the

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96 Conversation with Don Despain, December 14, 1988.

97 "Wildland Fire Management Plan for Yellowstone National Park," 5.

majority of acres burned. As time passed, the fire management unit where natural prescribed fire was allowed (the Yellowstone FMU) grew to include most of the Park, excluding areas surrounding and downwind from the various villages such as Old Faithful and Canyon as well as the borders of the Park.[98] From 1972, for 15 years up to the summer of 1988, 235 fires were recorded under Yellowstone National Park's fire management plan. Of those 235, the vast majority burned out at less than 1 acre, only 15 were larger than 100 acres, and 7 flamed larger than 1,000 acres.[99] The contrast with the experiences of 1988 could hardly be more striking.

As the fire management plan was refined, "it became very obvious that fire was an infrequent but important part of the process, a factor in the whole Yellowstone ecosystem, [and] had been [so] for a very long time."[100] Two fire seasons, the dry summers of 1979 and 1981, saw several large fires burn on the Park.

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8 Conversation with Don Despain, December 14, 1988.

9 "Wildland Fire Management Plan for Yellowstone National Park," 63-67.

100 Conversation with Don Despain, December 14, 1988.

Those fires inspired inquiries to determine the extent of past fires. By observing even-aged stands of lodgepole pine still young enough to have distinguishable borders, one place was found that indicated a fire of about 40,000 acres. Going through old records, a 1910 burn of 22,000 acres was found as was a 1931 fire of about 18,000 acres.[101] This indicated the extent of past fires and pointed to the scope of fires to come. Even natural prescribed burns of 1979 and 1981 did not change expectations; 1979 experienced three fires larger than 1,000 acres, the most extensive being the 4,900 acre Beaver fire, while 1981 had four similarly large fires, the largest of which covered nearly 7,400 acres.[102]

While a fire management policy that allowed natural fires under certain prescribed conditions had not existed as long on the National Forests, fire records on wilderness areas corroborated the data discovered for Yellowstone National Park. For example, there were only

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101 Conversation with Don Despain, December 14, 1988.

102 "Wildland Fire Management Plan for Yellowstone National Park," 63-67.

a few fires larger than 100 acres and only one larger than 300 acres on the Bridger Wilderness from 1955 to 1980.[103] The "Teton Wilderness Fire Management Plan" concluded in 1981 that while no large fires had burned on the wilderness during the short tenure of the plan fires of the magnitude of three and four thousand acres had occurred in Yellowstone National Park. Those fires had happened in similar fuel types and the wilderness could eventually expect to experience correspondingly "large fires within our prescription limits."[104] For the forests and parks of the Greater Yellowstone Area, the fire record of this century suggested that fires would generally be small and inconsequential unless episodic extreme conditions caused large fires that would burn from several hundred acres on the low end to twenty or thirty thousand acres at the upper extreme. Although there was a growing recognition that large fires occurring from 100 to 400 years ago burned vast

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103 U.S. Department of Agriculture-Forest Service, Intermountain Region, Bridger-Teton National Forest, "Bridger Wilderness Fire Management Area Plan," (Jackson, WY: 1984), 9-13. Hereafter cited as "Bridger Wilderness Fire Management Area Plan."

104 "Teton Wilderness Fire Management Area Plan,", 7.

acreages creating the large even-aged stands in the GYA, the vastness of the fires of 1988 surpassed almost all expectations.[105]

Potential for High-Intensity Fire

Even though recent fire history had suggested fires in the magnitude of hundreds, thousands, and even in the tens of thousands of acres, fires in the hundreds of thousands of acres were apparently beyond anyone's expectations. Yet in the Aggregation of National Park and National Forest Management Plans prepared in 1987, it was recognized that a high potential for high-intensity fire was present on vast acreages of the region. For Yellowstone National Park, the Bridger-Teton, Gallatin, and Shoshone National Forests, and to a lesser extent, the Targhee National Forest, nearly one-third of the units' total acreage, given the right weather, was seen to have substantial potential for high-intensity fire. Indeed, acreages on those

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105 Burns Oral History, .

units with either moderate potential or high potential added up to well over 50 percent. The percentages on Grand Teton National Park and the Beaverhead and Custer National Forests were much lower, but these units still had areas where the likelihood of high-intensity fire was moderate or high.[106]

The age of the forest stands contributed to the potential for high-intensity fire. The Aggregation showed that most of the GYA forest types were old. Phrased in more pejorative terms, they were "decadent"[107] with insect-killed timber and an abundance of dead and fallen trees. Moreover, the vast majority of Yellowstone National Park's forests were lodgepole pine, classified as old (greater than 80 years). The surrounding forest also had large percentages of aging lodgepole as well as well-seasoned stands of spruce, fir, and whitebark pine.[108]

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106 The GYA: An Aggregation of Plans, 3: 88.

107 Burns Oral History, .

108 The GYA: An Aggregation of Plans, 3: 69-87.

The presence of these large stands of aging trees led some to conclude that huge, high-intensity fires had occurred in the past and, speaking in the abstract at least, could happen in the future.[109] John Burns and his staff estimated that a burn of comparable magnitude with the 1988 fires occurred in the 1870's. He commented that he had read "where some say that it's been three or four hundred years." However, Burns himself had "a tough time visualizing how we would have gotten these present lodgepole forests if the last big fire event were that long ago. They wouldn't have been that uniform or bug-free up until the '60s." Although Burns and his staff viewed the cycle of large fires as much shorter than others, he admitted that "none of us will be here in another 100 years to see who was right."[110]

The 1988 fire year got off to a relatively normal start, and business-as-usual expectations were based on the best data available. Fire ignitions began as early

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109 The GYA: An Aggregation of Plans, 3: 88.

110 Burns Oral History, .

as January on the parks and forests of the GYA. The Stillwater fire on the Custer National Forest was the first fire reported in 1988. Similarly, the Storm Creek fire, the first fire ignition that was destined to become a permanent fixture for the summer of 1988, started by lightning in a wilderness area of the Custer National Forest. The fire was first reported on June 19, but afterward an outfitter acknowledged having seen the fire as early as June 14. Across the GYA, 31 ignitions had preceded the start of the Storm Creek fire, most of which either burned out by themselves or were suppressed at less than an acre.[111] Of those 31 ignitions, 28 were designated as wildfires while 3 were designated as prescribed natural fires.

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[11] U.S. Department of Agriculture-Forest Service/U.S. Department of Interior-National Park Service Interagency Task Force (Kathy Davis, Leader), "Greater Yellowstone Area Fires of 1988: Phase II Report," (West Yellowstone, MT: October 12, 1988). See Appendix C. Hereafter cited as, Interagency Task Force, Phase II Report.

Prescribed Fire

As defined by the late 1980's, a wildfire is an undesirable wildland fire that requires appropriate suppression action. By contrast, a prescribed fire is a wildland fire that is allowed to burn to achieve land management objectives if conditions do not exceed specified bounds. Once those prescriptions are exceeded, the fire is classified as a wildfire and suppression action is taken. Prescribed fires can result from either planned (man-set) or unplanned ignitions. While some areas have extensive planned-ignition prescribed fire programs, Yellowstone National Park executes very few planned prescribed ignitions as do the other units of the GYA.[112]

The force of the 10 A.M. Policy and Smokey the Bear imagery notwithstanding, the practice of prescribed burning, or what was once informally called light-burning, had existed for years. Indeed, frontier

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112 Conversation with Bob Barbee, December 15, 1988.

folk-practices in the West and particularly in the South included light-burning to control insects or improve range conditions. The practice was discouraged, however, as the Forest Service assumed the physical and educational responsibility for fire on the Nation's forests.[113] It was not until the late 1960's and early 1970's that agencies with wildland fire control organizations compromised the firm resolve that fire was "bad" in all aspects--a philosophy embodied in the 10 A.M. Policy and later communicated by the Smokey the Bear program.

The three prescribed natural fires that occurred before the Storm Creek fire burned out at very small sizes as did the fires that were declared wildfires. For the entire fire season 249 fires occurred in the GYA. Thirty-one of those fires were initially classified as prescribed fires of which 28 were in Yellowstone National Park. Twelve of Yellowstone National Park's prescribed fires burned out at less than 1 acre, while the other 16 were later declared

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[113] Pyne, Fire in America, 143-161.

wildfires.[114] Prescribed fires that escaped prescription and were later designated as wildfires were often assigned the flag-name "policy fire" by the press and other nonagency people trying to describe the origins of the fire.

Of the major fires in the GYA, five came to be termed "policy fires" where the fire was initially thought to be in prescription with the probability of it staying in that category: Storm Creek fire, Snake River complex, Fan fire, Clover-Mist fire, and the Mink Creek fire. These fires were started by lightning in either wilderness areas in the national forests or in Yellowstone National Park. As mentioned previously, the first was the Storm Creek fire that, according to an outfitter's report, started after a lightning storm on June 14 in the Absaroka-Beartooth Wilderness of the Custer National Forest.[115]

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114 This figure may be high because, in Yellowstone National Park, several fires were classified as prescribed fires if they were recent ignitions in the vicinity of larger fires and no individual suppression activity was planned for the new fire.

115 For information on the Storm Creek fire, see Interagency Task Force, Phase II Report, 138-148; Greater Yellowstone Coordinating Committee, "Hellroaring and Storm Creek Interagency Fire Review Report Conducted for the Greater Yellowstone Coordinating Committee," (Bozeman, MT: November

Snake River complex originally was a series of fires that, because of proximity and perimeters, eventually intersected and were managed as a single fire. The first fire of the Snake complex was the Shoshone fire which started June 23 near Shoshone Lake on the southern edge of the Madison Plateau in Yellowstone National Park.[116] Starting on June 25 in the northeast corner of the Park was the Fan fire which had the potential to first cross unit boundaries and threaten private land.[117] The Clover-Mist fire, a combination of six lightning-started fires originally designated as prescribed fires, was named after the first two ignitions: the Mist and the Clover which ignited respectively on the 9th and 11th of July in the northeastern portion of the Park.[118] The Mink Creek fire, or what was later sometimes called the Mink fire

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18, 1988).

116 For information on the Snake complex, see Interagency Task Force, Phase II Report, 153-167.

117 For information on the Fan fire, see Interagency Task Force, Phase II Report, 148-152.

118 For information on the Clover-Mist fire, see Interagency Task Force, Phase II Report, 168-184; Greater Yellowstone Coordinating Committee, "Clover-Mist Fire Review," (December, 1, 1988).

to accommodate being named in combination with another fire, began on July 11 in the Teton Wilderness of the Bridger-Teton Forest.[119]

These fires burned over 723,000 acres, over 51 percent of the burned area in the Greater Yellowstone Area.[120] That these "policy fires" were initially allowed to burn without efforts at suppression became a rallying cry for critics who characterized the policy as a "let-burn" approach. As the summer progressed, all fires in the GYA were often characterized as coming at the hand of a "let-burn" policy that cavalierly allowed all fires to burn. Policy, in fact, was more complicated and structured than was often portrayed. As Regional Forester Cargill noted: "It was just simply too

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119 Greater Yellowstone Coordinating Committee, "Huck-Mink Fire Review," (November 7-10, 1988), 1. For information on the Mink Creek fire see also, Inside Track July 11-September 26 1988; Bridger-Teton National Forest, "Incident Chronology Mink Incident;" and Interagency Task Force, Phase II Report, 55-58, 92, 185-200.

120 Greater Yellowstone Coordinating Committee, "The Greater Yellowstone Postfire Assessment," 19-38. The "Postfire Assessment" distinguishes between fire perimeter and a more precise acreage of area burned. Area burned is further subdivided into classes: Canopy, Surface, Meadow, Sage/Grassland, and Unburned. Although some Park Service and Forest Service employees expressed disappointment because they felt that media reports that utilized fire perimeters were unfair because they exaggerated the severity of the fires, by the end of the fire season the total in Burned Area was 1,405,775 and the Total Perimeter Area was 1,588,600--a discrepancy only just over 10 percent.

complex to develop in a 30-second news bite and it just got wrapped into this 'let-burn' policy."[121]

All fires were not simply allowed to "let burn. Some fires were immediately suppressed while others were allowed to burn if data or experience indicated that under specified conditions fires would stay within prescription. When that fire burned under prescription it would accomplish positive land management objectives (in the case of the Forest Service, multiple use lands) or restore natural processes (in the case of the Park Service and Forest Service, wilderness lands).[122] These desired goals could be achieved without danger to safety or property--if the fire behaved after a fashion that was anticipated by previous experience. Unfortunately, conditions in 1988 were unprecedented and clearly unexpected, as in the case of the Storm Creek fire, Snake River complex, Fan fire, Clover-Mist fire, and the Mink Creek fire. In June and July, the GYA experienced fires initially classified as prescribed

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121 Cargill Oral History, ; Tixier Oral History, ; Anzelmo Oral History, .

122 See, "Bridger Wilderness Fire Management Area Plan;" and "Wildland Fire Management Plan for Yellowstone National Park."

fires that later exceeded expectations and required suppression as wildfire. Fires also occurred that were suppressed from the beginning, some successfully and others, infinitely more infamous, resisted all efforts at control.

CHAPTER VI

PRESCRIBED FIRES OF PERMANENCE

In June and July, several decisions were made to classify some ignitions as prescribed natural fires and allow them to burn for the period they were expected to stay within prescription. The month of July saw those decisions reversed. No more prescribed fires were allowed after July and, shortly before the end of that month, all fires that had been designated as prescribed fires had been reclassified as wildfires.[123] Decisions on individual ignitions and fires hinged on a variety of issues. Key among those were 1) conditions that exceeded levels prescribed by fire management plans, 2) the likelihood of fires crossing unit borders, 3) a recognition that fires displayed unusual intensity

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[123] In an exception to this statement, some fires in Yellowstone National Park were listed as prescribed fires in their fire log after July, because no individual suppression was planned on the new ignitions due to proximity to larger fires. This became the cause of some confusion. See Interagency Task Force, Phase II Report, 57.

despite conditions that did not exceed the cap placed by technical prescriptions, and 4) apparent threat to property and safety. A look at each of the so-called "policy fires"--the Storm Creek, Snake River complex, Fan, Clover-Mist, and the Mink Creek fires--can demonstrate how these issues impacted decisions for suppression.

Storm Creek Fire

Storm Creek is a good example of a fire that far exceeded predictions based on fire management plans established from previous data and experience. The Storm Creek fire was detected by Beartooth Ranger District personnel on June 19 but an outfitter subsequently reported sighting the fire as early as the 14th. District personnel immediately recommended to the forest supervisor that the fire be given prescription status which was granted on the 20th. At that point, it was projected that the fire would burn to 600 acres under the anticipated conditions. If conditions were unusually severe, the fire was expected to reach 2,200

acres. The fire behaved as anticipated until June 30 when it pressed into heavier fuels and increased by half again its previous size. On July 2, forced by a strong wind, Storm Creek made a 3 1/2-mile run with the fire perimeter reaching 2,400 acres. Wind continued the following day, and it was determined that conditions exceeded the established limits of the fire management plan and the fire was a potential threat to public safety and public property.[124] The Storm Creek fire eventually reached a burned perimeter of over 100,000 acres, threatening the small gateway communities of Silvergate and Cooke City and engendering an explosion of public emotion. While the Storm Creek fire was the first ignition with the prospects for permanence in the summer of 1988, it was not the last.

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[24] Interagency Task Force, Phase II Report, 139; and Tomascak Oral History, .

Snake River Complex

The Snake River complex was a combination of five fires of which the first three ignitions--the Shoshone, the Red, and the Falls--burned as prescribed natural fires. The Shoshone fire was first sighted on June 23, the first observation of the Red followed in 8 days. The Shoshone started not far from the outlet to the Lewis River on Shoshone Lake in the southwest portion of Yellowstone National Park. The Red fire sprang up some 7 miles to the south on the southwest side of Lewis Lake. Both fires were designated as prescribed fires shortly after observation and burned slowly through July 9 when the Shoshone fire burned vigorously with flame lengths of 100 feet reported.

Despite the active fire behavior, by July 12 both fires were still considerably less than 100 acres, but the Shoshone fire had spotted[125] to the north over the

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125 Spotting is when sparks or embers are carried ahead of the fire front by wind and/or convection columns, and new fires are ignited beyond the area of direct ignition by the primary fire.

Lewis River, a major barrier between the fire and the Grant Village development 6 miles to the northeast, on the tip of the west thumb of Yellowstone Lake. This caused concern because wind patterns in the GYA had been out of the southwest, practically a direct line from the Shoshone and Red fires to Grant Village.[126] Despite this worrisome development, the Shoshone and Red fires were still not expected to pose a serious or immediate threat to the visitor center, marina, campgrounds, motel, gas station and store, and other improvements at Grant Village.

Preliminary plans for the protection of the village began as early as July 16, but it was not until July 19 that conditions were perceived to be serious. On that day the GYA experienced what, through the process of a blustery summer, became known as a wind event. Fanned by high winds, the Shoshone fire blazed from the ground into the forest canopy. Spot fires ignited as flaming brands and burning embers carried by the wind ignited new fires as far as 800 yards in front of the main fire

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126 Mitchell Oral History, .

front. The fire ran for 2 miles that day and did not lie down until it had reached a location just south of the Continental Divide, the approximate halfway point between the spot of ignition and Grant Village. In light of impending danger to facilities and public safety at Grant Village, decisions for suppression were not far off. On the 20th an Escaped Fire Situation Analysis (EFSA), a document assessing suppression alternatives, was prepared. This EFSA recommended suppression on the fire's eastern and northern fronts. Early on July 21, the Red and Shoshone fires along with the Falls fire were reclassified as wildfires and arrangements were made for suppression.[127]

While the decision for suppression on the Red and Shoshone was based on the fires' direct threat to property and safety, the decision for initial suppression efforts on the Falls fire was founded on the desire to keep the fire from crossing unit boundaries.[128] Starting a mile inside Yellowstone

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127 Interagency Task Force, Phase II Report, 154-164.

128 John Burns to Robert Barbee, July 12, 1988; John Burns to Jack Stark, July 12, 1988.

National Park northeast of Grassy Lake, a Bureau of Reclamation reservoir in the Bridger-Teton National Forest, the Falls fire was first sighted by smokejumpers on July 12. It was on this day that John Burns, supervisor of the Targhee, drafted a letter informing the superintendents of Yellowstone National Park and Grand Teton National Park that, although "in previous years with normal weather patterns, we would have been able to accept natural fires from the Yellowstone National Park onto the Targhee National Forest," in light of the drought and burning conditions the Forest could not accept[129] prescribed fire from across shared boundaries.

Commenting on the severe circumstances, Burns' letter explained that "other national forests within our region are also experiencing similar conditions" and "consequently, our resources for controlling fires are

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129 To accept a prescribed fire means that when a fire approaching from another unit meets fire management objectives, prescriptions, and terms of the other agencies policy for that particular fire, it will be allowed to cross unit boundaries without suppression efforts. If the one unit's prescribed fire does not meet the objectives and prescriptions of the adjacent unit, it is the responsibility of the unit on which the fire ignited to take appropriate suppression measures to keep the fire from crossing the boundary. See Burns Oral History, .

in heavy demand at this time and are expected to be committed throughout [the] season." Although the letter was drafted the same day the Falls fire was reported, the letter does not mention the new ignition.[130] Later, Burns explained that at the end of the 1987 fire season the Targhee had experienced late-season fires which were particularly difficult to suppress and that the summer of 1988 already had indications of severe conditions developing. The situation was such that Burns felt that a prescribed natural fire could not be risked, especially considering the history of prescribed burns on the forest. In 1979, the Gallagher Peak fire had been initially designated as a prescribed natural fire but later roared out of prescription, burning a lot of real estate as well as heating some political waters.

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130 John Burns to Robert Barbee, July 12, 1988.

As Burns recounted:

> We also remembered, even though few of us were here when it actually happened, the Gallagher Peak fire. That fire was a management fire, lightning-caused, that for several weeks had burned up on Gallagher Peak and had done nothing. Suddenly one of those heavy wind conditions hit and it took off down the mountain and, I think, burned a couple of hundred thousand acres. It covered a lot of country, it made a lot of distance.[131]

As the summer of 1988 progressed, Burns later related: "Yellowstone had several prescribed fires that we could see the smoke from. The Falls fire was one such and was very close to our boundary." Burns and his fire staff "were worried about it and we didn't want the Park thinking we'd be in a position to accept a

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.31 Burns Oral History, .

prescribed fire. By accept I mean say, 'Okay, it will meet our objectives, let it cross the line'."[132]

On July 17, Yellowstone National Park officials prepared a fire situation analysis (FSA) that advised containment on the south perimeter of the Falls fire in order to stop the spread of the Falls fire toward the shared border with the Targhee. Although suppression action was taken on the southern flank of the fire, it was not reclassified as a wildfire, and the north flank was allowed to continue to burn as a prescribed fire.[133] It was managed under this arrangement for only 4 days when the Falls, Shoshone, and Red were declared wildfires and were grouped into the Snake complex for suppression.

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132 Burns Oral History, .

133 Interagency Task Force, Phase II Report, 161.

Fan Fire

There were efforts to confine the Fan fire before it was declared a wildfire in much the same way that suppression action was taken on the south flank of the Falls fire. This strategy was followed even while the rest of the fire was burning unchecked as a prescribed fire and for much the same reason. While firefighters battled the southern flank of the Falls fire to prevent it from crossing the Yellowstone National Park boundary onto the Targhee National Forest, efforts were taken to keep the Fan fire from leaving the northwest corner of the Park and spreading onto private land. The Fan fire, a lightning ignition, was first reported on June 25, burning to the east of Highway 191 not far from the Montana-Wyoming border.[134]

Shortly after the fire was reported, the Park's fire committee met, evaluated the ignition, and recommended to the superintendent that the fire be classified a

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34 Interagency Task Force, Phase II Report, 148.

prescribed fire. The meeting of the fire committee is an essential process in the implementation of Yellowstone National Park's wildland fire management plan.[135] The Committee's purpose is to evaluate an ignition, make projections, and recommend how the fire should be managed to the Park superintendent who has the final responsibility on the decision. Don Despain, member of the fire committee and experienced fire behavior analyst, explained his role on the committee:

> I . . . find out exactly where it is, get out the air photos, look at the vegetation maps, get a weather forecast, find out all those things that we can and we make a determination of what we expect that fire to do and based on our past experience, and the best information we can get, we project where it could be by the end of the summer under different conditions. . . . then the decision is made whether to put it out or allow it to go.[136]

The fire committee's evaluation of the Fan fire designated it as a prescribed natural fire. The evaluation outlined the approach to the prescribed fire which included continual monitoring, notification of

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135 "Wildland Fire Management Plan for Yellowstone National Park," 26-27.

136 Conversation with Don Despain, December 14, 1988.

adjacent landowners, press releases, and weather forecasts. After proportionally large increases in acreage over the 2d and 3d of July, the Fan was placed in a confinement mode with light suppression action taken even though the fire was still classified as a prescribed fire.[137]

In June and early July, the Fan did not engender much interest from news media or even neighbors to the Park. As Joan Anzelmo, the Park's Public Affairs Officer noted: "In June . . . we had one very small fire burning in Yellowstone which was the Fan fire and it was meandering around, smoldering, not doing a whole lot." Although the Park was releasing daily reports to the "local media on the Fan fire, there was not a great deal of interest because it was nothing out of the usual. It was similar to what had happened here in years past with early fires in June . . . that we fully expected to go out with subsequent rainfall."[138] But as July wore on, more interest was paid to the Fan fire, particularly by

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37 Interagency Task Force, Phase II Report, 148.

38 Anzelmo Oral History, .

the residents of Cinnabar Basin and Mulheron Drainage immediately north of the Park boundary downwind from the blaze. Edward Francis, the executive vice president of the Church Universal and Triumphant, a religious group headed by Francis' wife, Elizabeth Clair Prophet, remembered being very anxious about the fire. The Church owns the Royal Teton Ranch to the east of Gardiner, Montana, which runs along a portion of the northern border of Yellowstone National Park. Francis, who by his own admission has had several conflicts with the Park, remembers that approximately the week of July 20 he wrote to Superintendent "Barbee . . . basically begging that he do something" about the Fan fire.[139] At the heart of Francis' frustrations was the belief that the Park was not doing anything on the fire. He complained that Yellowstone National Park officials claimed that everything was under control and that the fire "was within its containment boundaries, but the problem was that its containment boundaries moved every

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139 Francis Oral History, .

day . . ." and "as the fire would advance they had a new containment boundary."[140]

Although the conditions of the fire season of 1988 caused many unexpected results in the GYA, the Fan fire was contained within the Park at a perimeter only slightly over 20,000 acres. It did, however, require vigorous suppression. On July 25 Park officials determined that the suppression efforts taken by Park firefighters were not enough and the fire was declared out of prescription. Plans were then laid for what was to become the most concentrated suppression effort on any single fire in the history of the Greater Yellowstone Area.

Clover-Mist Fire

The Clover-Mist fire originated as a series of lightning-ignited prescribed fires in the northeast portion of Yellowstone National Park. Starting on July 9, the Mist fire was designated as a prescribed natural

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40 Francis Oral History, .

fire as was the Clover fire which started 2 days later. At the time the Mist and the Clover were being evaluated, the Fan, Red, and Shoshone fires were burning as prescribed fires, and none had yet reached more than 300 acres. Given this fact coupled with the perception that a fire could burn between 10,000 and 40,000 acres at the worst, the rationale for designation as prescribed natural fires seemed sound.[141] However, the Clover fire grew with particular rapidity. Back-country structure protection was taken on both the Clover and the Mist, and on July 14 firefighters protecting a patrol cabin were forced to deploy their fire shelter--a safety device often called a "shake-n-bake" bag, in firefighter jargon, which as a last resort protects the firefighter from flame and heat as the fire passes over them.

The decision to suppress the fires that came to be known as the Clover-Mist involved the issue of prescribed fires as they approached a unit border much the same as the Fan and the Falls. In this case it was

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141 Greater Yellowstone Coordinating Committee, "Clover-Mist Fire Review," 6.

a shared border between Yellowstone National Park and the Shoshone National Forest. Key to the decision whether to accept a prescribed natural fire from one unit to another is whether the fire meets the objectives and the prescriptions of the adjacent unit's fire management plan.

Yellowstone National Park's fire management plan divides the Park into three general fire management areas (FMA). The Yellowstone FMA includes most of the area of the Park except for the Village FMA, which includes areas surrounding developments and roads, and the Boundary FMA.[142] Each FMA has a different procedure for the classification of new ignitions. As stated in the fire management plan, "the Boundary FMA exists because the political perimeter of Yellowstone National Park does not coincide with natural fire behavior barriers."[143] The classification of fires must consider not only the objectives of the unit but also the objectives of its neighbors. In the case of

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142 "Wildland Fire Management Plan for Yellowstone National Park," 17-22.

143 "Wildland Fire Management Plan for Yellowstone National Park," 18.

Yellowstone National Park, as the plan points out, "in some places, this means that fires must be controlled before they leave the park. In other places and other times, fires may be allowed to cross the park boundary under the specified conditions of cooperative agreements." And, as will be discussed in the next subsection, "the park may accept fires that originate outside the park and burn into it."[144]

The Boundary FMA is divided into smaller divisions called fire management units or FMU's. The FMU affected by the Clover-Mist fire was the Shoshone FMU that runs along the high mountain ridge that separates the Shoshone National Forest from Yellowstone National Park. This boundary is perhaps the least artificial in the GYA. While many borders follow human constructions such as the minutes and seconds of longitude and latitude or the checkerboard of townships and sections, the Shoshone FMU, the frontier between the Park and Forest, follows the crestline of a rim of mountains. As Yellowstone's wildland fire plan points out, the

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144 "Wildland Fire Management Plan for Yellowstone National Park," 18.

Shoshone FMU is a political boundary, but it is also a natural barrier that "except in extreme cases . . . should be adequate to contain fires" from crossing from forest to park or vice-versa. The plan continues by pointing out that "the national forest lands adjacent to this Unit all have wilderness status, and a natural fire from forest or park should--in the unlikely event that it cross the crestline--be acceptable to the receiving agency."[145]

But both objectives and the prescriptions of the fire management plan must be met. On July 14, a representative of the Forest verbally told Park personnel that the Forest would accept the fires in the North Absaroka Wilderness even though the Clover-Mist was technically already out of prescription based on weather, fuel, and size factors.[146] One week later on the 21st, the Shoshone National Forest formally reversed this position and informed the Park that they would not accept the Clover-Mist as a prescribed natural fire.

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45 "Wildland Fire Management Plan for Yellowstone National Park," 19.

146 Greater Yellowstone Coordinating Committee, "Clover-Mist Fire Review," 6.

The Park immediately declared it a wildfire and set the wheels in motion for suppression. At that time the Clover-Mist was approximately 12,500 acres.[147]

Mink Creek Fire

The Mink Creek fire started as a prescribed natural fire in the Teton Wilderness of the Bridger-Teton National Forest on July 11. It burned without suppression effort for 3 days when it was declared a wildfire on July 14 by Forest Supervisor Brian Stout. The fire was technically in prescription, yet in light of the severe burning conditions and the extreme behavior exhibited by the Mink Creek, suppression efforts were planned.[148] When Gary Cargill rode horseback near the edge of the Clover-Mist fire around July 15, the regional forester recalled that he was concerned and perhaps a little nonplussed about the fire behavior he was observing. Talking about the

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147 Greater Yellowstone Coordinating Committee, "Clover-Mist Fire Review," 6.

148 Stout Oral History, .

Clover-Mist, Cargill said: "I could look at it and turn in the saddle to look back over my shoulder at the Mink fire on the Bridger-Teton. It had a huge cloud in the air of maybe twenty, twenty-five thousand feet and I just couldn't believe that these were fires that were anything but wildfires." Afterward he told some colleagues that "this was not business as usual."[149]

Although the Mink Creek was technically in prescription, by the 14th of July Stout had agreed with Cargill's assessment and ordered suppression on the fire. As Stout explained: "it's not a simple decision to class a fire as a prescribed natural fire and it's not a comfortable position to be in as a line officer to have to make that decision because you're playing a very high risk. Yes, you've got a prescription," and "yes, we've agreed from a policy standpoint that naturally-occurring fire can have some benefits, but that's an unknown factor of how it's going to react,

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[149] Cargill Oral History, .

what it's going to do, and so it's a subjective decision that has to be made."[150]

Speaking of his decision on the Mink Creek and other decisions throughout the GYA, Stout commented that "they are decisions that take a lot of knowledge and a lot of guts . . . ." The tendency is to "cop out and never let one go, but then that's never following the policy, either." A decision is made and then "you see what the reaction is to the decision" and "you reassess quickly and try to make the right decision to make any adjustments that may be necessary. That's what we did with the Mink Creek fire, and I'm confident that's the way the Park probably reacted also."[151]

Although the Mink Creek was declared a wildfire on July 14 by the Bridger-Teton National Forest, some documentation shows that the Park accepted it over the shared boundary as a prescribed natural fire.[152] A

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150 Stout Oral History, .

151 Stout Oral History, .

152 Interagency Task Force, Phase II Report, 123; and Greater Yellowstone Coordinating Committee, "Huck-Mink Fire Review," 17. See also Bird Oral History, .

GYCC-sponsored review of the fire concluded that the perception existed that "there was little coordination on commonly recognized objectives and strategies between the Bridger-Teton National Forest and Yellowstone National Park on the Mink fire" and that "this perception was in fact mostly true."[153]

Gary Cargill saw this as a question of communicating objectives. "If something is called a wildfire in the Forest Service you can't return it to a prescribed fire, it's a wildfire and your objective is suppression . . . ." and if in the course of events it crosses a boundary and "somebody inadvertently, unknowingly, or with purpose, checks a box and calls it a prescribed fire again, it raises all sorts of questions about what the objectives are." Doug Bird asserted that it was important to note that "the action on the ground may not have been any different under a natural prescribed fire or a wildfire. But when you go through the record and talk about objectives--what people were trying to accomplish--it's very difficult to reach the conclusion

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53 Greater Yellowstone Coordinating Committee, "Huck-Mink Fire Review," 17.

that we really had our act together" and " were communicating clearly and were calling things the same." Moreover, "the public media and the press were reviewing the records and talking to people. If you get a different answer to the same question, even though it may be well intentioned and unknowing about terminology, it does cause confusion."[154]

The classification of prescribed fires became an item of controversy as critics claimed that the suppression effort was not aggressive enough. Defending Yellowstone National Park's actions on the Mink Creek, Dan Sholly, Yellowstone National Park's chief ranger, asserted that the relatively small suppression effort on the Park's portion of the Mink Creek fire was a matter of strategy rather than policy. Sholly explained that "there weren't resources available to" smother the fire "once it got into the Park compared to all the needs of other high value at-risk areas. By the time it got into the Park we were having daily and regular threats to developed areas. To think we're going to put 10 to 20

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154 Cargill Oral History, .

crews . . . ," continued the chief ranger, "into the farthest, most isolated area in the continental United States where there was nothing but a few cabins at risk, didn't make any sense at all. That was just a matter of priority."[155]

Indeed, as the fire season deepened, the need to set priorities in the allocation of limited firefighting resources became increasingly crucial. In addition to the suppression efforts required on the prescribed fires, resources were stretched thin by major fires such as the North Fork, Huck, Hellroaring, Hunter, Fayette, and Corral Creek fires as well as many other ignitions that were more effectively suppressed.

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55 Sholly Oral History, .

CHAPTER VII

TOO CATASTROPHIC, TOO THREATENING

As events evolved the Greater Yellowstone Area fires of 1988 became the stage for one of the largest fire suppression efforts in the history of the United States. At the peak of the summer, over 10,000 firefighters were assigned to the blazes. Forces included trained personnel from the Forest Service, Park Service, Bureau of Land Management, Bureau of Indian Affairs, and many state agencies.[156] In August, when the national fire situation spread firefighting resources thin, the military was called in to help by providing a disciplined, equipped, and physically fit labor force. With the periodic rotation of firefighters, it was estimated that some 25,000 people worked on the suppression of the Greater Yellowstone

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156 Bird Oral History, .

fires of 1988.[157] Fire camps, like cities springing up overnight, were established, requiring the support of food caterers, sanitation services, communications experts, and many other services.[158] Literally tons of firefighting supplies, running the gamut from paper sleeping bags to fire-resistant clothing, were requisitioned and distributed. Purchases had to be accounted for and firefighter hours logged. Air operations had to be dispatched and mobilization of crews commanded attention. Coordination was needed among firefighting forces. For example, Forest Service crews may have had to work alongside California Department of Forestry crews, and Bureau of Indian Affairs crews may have had to work in concert with an engine crew from a Wyoming county. In short, the fire suppression effort was an immensely complex operation costing millions of dollars, involving many entities,

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157 Sholly Oral History, .

8 Joe Peterson, a Class II crew member, remembered that although meals were typically well prepared and satisfying, "every meal had some greasy meat item. About the steady diet of greasy meat, the firefighters created and passed along a prophetic proverb: 'Lighting strikes and a thousand pigs die!' Sausage for breakfast, ham sandwiches for lunch, and a porkchop for dinner." Peterson Oral History, .ãDéé

covering many jurisdictions, and requiring a high degree of organization to operate such a complicated and diverse operation.

Incident Management Arrives

The Incident Command System provided the organizational framework that salvaged order out of chaos. As Doug Bird, the Intermountain Region's Director of Fire and Aviation Management, explained: "The Incident Command System . . . is a way of organizing to handle emergencies." In the late 1960's and early 1970's fire situations developed in southern California that involved many overlapping government agencies and jurisdictions. Bird asserted that in those multi-jurisdictional fire events it was "hard for everybody to get together and sort out and decide who does what to whom and how it works. The Incident

Command System was developed because of that concern."[159]

"An innovation which grew out of a project called Firescope . . .," explained Gary Cargill, "the Incident Command System was developed "in response to situations in southern California where there were multiple jurisdictions having to respond to the same fire."[160] The system was designated as "Incident Command" because "you might have a flood or an earthquake" or any manner of natural or human incidents "and virtually the same organizations would have responsibility to respond."[161]

The National Wildfire Coordinating Group, a consortium of the major federal wildland managing agencies with representatives from the Bureau of Land Management, the Bureau of Indian Affairs, the National Park Service, and the Forest Service as well as a delegate from the National Association of State Foresters, agreed that the Incident Command System held

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Richard A. Chase, "Firescope: A New Concept in Multiagency Fire Suppression Coordination," Washington, D.C.: U.S. Department of Agriculture-Forest Service, General Technical Report PSW-40.

1 Cargill Oral History, .

the key to integrated wildland fire suppression.[162] Under the System, firefighting forces from all agencies would use the same terminology, organization and procedures. Training would ensure a degree of uniformity among fire management personnel throughout all agencies concerned with wildland fire. This would provide for efficient interagency operations in multi-jurisdictional incidents as well as facilitate the concept of "total mobility."

At the same time that fire policy was being reexamined to allow for flexible fire management rather than total suppression, a transition was occurring in fire organizations. As agencies sought ways to improve cost effectiveness of fire suppression, it was recognized that a sharing of resources saved money. In a 1977 issue of Western Wildlands, Henry DeBruin, then Director of the Forest Service's Aviation and Fire Management staff, defined total mobility as "the capability of moving, positioning, and using resources

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162 Pyne, Introduction to Wildland Fire: Fire Management in the United States (New York: John Wiley & Sons, 1984), 278; Bird Oral History, .

to meet existing and anticipated needs of . . . suppression forces nationwide." This would make it possible for the "on-the-ground manager" to "draw on tremendous resources of manpower, equipment, and supplies that state and federal forest fire protection agencies have at their disposal." Moreover, total mobility was cost-effective because no one agency would have to "underwrite the expense of maintaining a firefighting force to meet its worst possible conditions."[163] To facilitate this, the member agencies of the National Wildfire Coordinating Group support the Boise Interagency Fire Center (BIFC) which acts as a clearinghouse for fire suppression resources. Putting it simply, Bird explained that:

> "BIFC is a small coordinating group of people that work together. Park Service people, Forest Service people, Bureau of Land Management people, State Forestry people, Bureau of Indian Affairs: people involved with fire suppression on federal and state lands, throughout the United States, common-housed where they can talk to each other and where they can share and dispatch for wildfire suppression. The organizations can help to share resources between and among themselves.[164]

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163 Henry W. DeBruin, "Fire Management Perspective: USDA Forest Service," Western Wildlands 4 (Summer 1977): 7.

164 Bird Oral History, .

In 1988, as local and regional resources were exhausted, BIFC tapped resources from diverse government agencies and locations across the country for the suppression effort in the Greater Yellowstone Area. That such disparate resources could be used in conjunction with one another was greatly facilitated by the Incident Command System. The System is organized into Incident Command management teams or overhead teams. Each Incident Command team is headed by an Incident Commander who is aided by sections staff: operations, planning, logistics, and finance. The incident commander and sections staff are called overhead and together manage the incident. Resources such as hand crews, engine crews, helicopters, tools, supplies, etc., are assigned to the Incident Command for use on the incident.

Management teams fall under two classifications: Class I teams and Class II teams.[165] Bird explained that Class I teams "have had higher levels of training

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165 The terms Type I and Type II are often used in place of Class I and Class II.

and are equipped both in training and experience to handle a fire situation anywhere in the United States. A step down from Class I teams are Class II teams which are more local in capabilities. Class I teams are interagency in scope and are composed of the "best people in the BLM, or the BIA[166], or the Park Service," or of other wildland fire managing agencies. They are specifically trained to handle fires in any habitat in the Nation, while Class II teams "know how to organize themselves," said Bird, "but they are more local in capabilities." Throughout the historic fire year of 1988, many Incident Command teams, both Class I and Class II, were deployed in the GYA. Class I teams were generally used when conditions were assumed to be more severe and greater values threatened. This classification system was applied in a similar way to fireline fighters as well where esprit de corps and status consciousness were distinctly held, especially between Class I and Class II hand crews.[167]

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166 Bureau of Land Management and Bureau of Indian Affairs.

167 Peterson Oral History, .

On Independence Day, July 4, the first Incident Command team of many was requested and deployed on the Storm Creek fire. The deployment of a team occurs when the unit manager--referred to as a line officer[168]--realizes that local resources are insufficient to deal with an incident. Not long after the Storm Creek was reclassified as a wildfire, a Class I team was ordered. Requested at 8:00 a.m., the team arrived at 10:00 p.m. and began planning for suppression. The Incident Command team manages the incident but takes its direction from the line officer. When a team arrives, papers are signed in which the line officer delegates authority to the Incident Commander. The team then executes a course of action decided upon by the Incident Commander and staff and approved by the line officer. On July 6, the forest supervisor and members of his fire staff met with the Incident

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168 A line officer is a manager that has decision authority, as opposed to staff or advisement authority, for a unit of federally managed land. In the Forest Service, line officer positions include the district ranger, forest supervisor, regional forester, and chief. In the Park Service, line officer positions include park superintendent, regional director, and director. This authority can be delegated in the case of a large park such as Yellowstone National Park. See Sholly Oral History, .

Commander and approved a strategy that continued to contain the north and west sides of the fire and employed a confine strategy on the south and east flanks. At this point, 105 personnel were assigned to the fire, including the overhead team, engine crews, and hand crews.[169]

By July 8, line had been constructed around the active fronts of the fire and plans were made to "demob"[170] the team and turn the management of the incident back to the ranger district by July 10. The fire was within confinement boundaries and was expected to stay there, and stay there it did for 40 days with only limited suppression action taken by the district. By August 18, the burn perimeter of the Storm Creek fire was 5,500 acres. However, on August 20, often referred to among observers as "Black Saturday,"[171] wind gusts

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69 There are three suppression strategies: Confine, Contain, and Control. The Confine strategy is to rely largely on natural features to limit the fire while the Contain strategy includes supplementing natural features with control line to limit the fire. The most assertive of the three, the Control strategy is aggressive suppression using control line, burning out, and other techniques to extinguish fire. See The GYA: An Aggregation of Plans 3: 92.

70 To demobilize; to send the team home or to another assignment.

71 Conversation with Jack Troyer, August 24, 1988.

estimated at 70 miles per hour whipped the flames out of containment boundaries as the fire gained 18,500 acres. A Class II team was ordered and was in place by the 21st.[172]

When incidents occur on a unit, the daily routine and mission of the unit do not stop. The overhead team frees the manager to attend to other more routine, yet important business. Yellowstone National Park's energetic Chief Ranger, Dan Sholly, noted that the Park felt it necessary to organize an Incident Command team "when the size and complexity of the fire situation exceeded what we felt was our local capabilities, recognizing that the rest of the Park was at a full-operation tilt in its busiest season."[173] On the 14th of July, the Park established its own Incident Command team. Sholly, a trained Class I Incident Commander, led the team, as he would for the duration of the summer, from the Park's Mammoth Headquarters. The incident was initially named the Yellowstone complex,

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172 Interagency Task Force, Phase II Report, 141-142; Mitchell Oral History, .

173 Sholly Oral History, .

but the name became confusing and was later changed to the Mammoth complex.[174] The Mammoth complex was unique from other Incident Commands in that it handled the initial attack for the Park and was responsible for all the fires before their severity dictated assignment of individual management teams.[175] Speaking of the Mammoth complex, Sholly said: "We were a little bit different than most other incident teams in that," before Incident Command teams were requested for the Snake complex on July 21 and for the Clover-Mist on July 23, "we were managing all of the fires within the Park. There was some suppression being taken on the Red fire and the Falls fire at that time."[176]

Following the management teams on the Storm Creek incident and the Mammoth complex, a Class I team was assigned to the Mink Creek fire on the Bridger-Teton National Forest. The Mink Creek fire was reclassified as a wildfire on July 14, and a team was requested on

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74 Sholly Oral History, .

75 Sholly Oral History, .

76 Sholly Oral History, .

the 15th. By the 16th, Dale Jarrell, the Incident Commander, met with Forest Supervisor Brian Stout to discuss options and strategy. They selected the containment strategy, using natural features and a control line built with a "light hand on the land" tactic. Light-hand tactics, Stout delineated, meant "using natural breaks, meadows, rock outcroppings, burning out from those natural barriers and then using a lot of those lines" to have minimal lasting impact on the land. The emphasis of the suppression effort was placed on the southern flank to keep the fire from entering a 15,000-acre area of timber blowdown.[177]

Stout recounted that "in July in 1987, we had a major tornado go through this country. It touched down in the Teton Wilderness area and impacted several thousand acres . . . which . . . concentrated some major fuel problems in the area." It was Stout's understanding, "based on some of the scientists that looked at" the tornado, that it was "one of the highest

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177 Greater Yellowstone Coordinating Committee, "Huck-Mink Fire Review," C-3; Interagency Task Force, Phase II Report, 186-187; Bridger-Teton National Forest, "Incident Chronology Mink Incident."

[in terms of elevation] occurring tornadoes on record in the United States."[178] Considerable pressure had been levered to allow salvage of the timber blowdown even though it was in wilderness. However, it was expedient for reasons of fire behavior and politics to keep the fire out of the blowdown. On July 20 a 900-acre burnout[179] was conducted to protect the blowdown. The burnout was not conducted without risk but it was highly successful. Stout regarded the use of burnouts as a very successful light-hand tactic. As Stout remembered:

> "We built line from natural meadow through blow-down from the 1987 tornado just south of Enis Lake, I was up in the helicopter the morning we made the decision or the IC [Incident Commander] made the decision to burn that out. That's probably the scariest burnout I've seen in my life, and probably the most effective I've seen in my life. Every inch of line held exactly as was planned on that whole thing during a very critical time in the burning period this summer. So, quite frankly from my perspective I think these light hand tactics proved to us to be one of the most effective means of actually suppressing fires this summer. And all it meant was just relying on natural barriers, using those areas to our benefit and removing the fuel before the fire got there so we could stop it.[180]

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178 Stout Oral History, .

179 Intentionally setting fire to fuels inside the control line to strengthen the line. When the main fire front approaches the line, fuel that may have carried the fire past the line would have already been consumed by the burnout.

180 Stout Oral History, .

Although, as Stout asserted, "light hand on the land" tactics proved very effective in many cases, later in the summer the terminology contributed to a public perception that the fires were not being fought aggressively. By the date of the burnout, August 20, the Mink Creek fire was receiving local and regional press coverage. Articles covered the decision to designate the fire as a prescribed fire and then to reverse the decision. The Jackson Guide reported that the decision whether to suppress the fire "was the weighing of a wilderness ethic that favors letting nature run its course against the practical need to protect people, wildlife and property."[181] In regional coverage, a Denver Post headline declared the existence of a "14,000-acre blaze near Yellowstone." The article discussed the natural conditions that were creating the severe burning situation as well as heralded the $1.8 million dollars spent on the suppression effort. Significantly, the article indicated a trend in the

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181 Geoffrey O'Gara, "The Decision: Fight It, or Let It Burn," Jackson Guide, Wednesday, July 20, A13.

regional and national press to use the nationally-renowned Yellowstone National Park as a reference point for fires throughout the Greater Yellowstone Area. This trend increased to the point that, by the end of the summer, the series of fires that plagued the entire Greater Yellowstone Area became known as the "Yellowstone fires," much to the chagrin of National Park officials.[182]

As the fires grew, public interest in the fires grew also. Media coverage increased and elements of the political arena became intensely interested in them. On July 22, Wyoming Senator Malcolm Wallop flew over the Mink Creek fire with Forest Supervisor Brian Stout. The tip of the political interest iceberg had surfaced, with the great mass of the block to be exposed later in gubernatorial envoys, secretarial visits, and a presidential campaign stop.

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[182] Todd Wilkinson, "14,000-acre blaze near Yellowstone," Denver Post Wednesday, July 20, 1988; Sholly Oral History, ; Anzelmo Oral History, ; Conversation with Bob Barbee, December 15, 1988.

Complexity Increases: Area Command

Interest in the fires of the Greater Yellowstone Area had reached unprecedented local and even regional levels by mid-July, but the 7 days from July 21 to July 27 brought the fires fully onto a national stage. This surge of attention started with the increased activity on the Snake complex which required suppression to safeguard Grant Village, expanded with the North Fork fire's threat to Old Faithful, and crested with the visit of Secretary of Interior Donald Hodel. July 21, one day after the successful burnout on the Mink Creek incident, the Shoshone, Red, and Falls fires of the Snake complex and the Clover-Mist fire were reclassified as wildfires, and incident management teams were ordered. The 22d of July saw the ignition of the North Fork fire which, as the summer rolled on, would cover approximately 500,000 acres. It would threaten gateway communities Island Park and West Yellowstone as well as major Yellowstone Park developments, including Old Faithful, Mammoth Hot Springs, Norris, Tower, and Canyon. July 23 and 24 saw the arrival of Incident

Command teams for the Snake complex and Clover-Mist fire, respectively. July 24 was a day for the crossing of boundaries. The Mink Creek fire crossed into Yellowstone Park from the Bridger-Teton National Forest through a narrow finger of trees near Yellowstone Meadows, and the Clover-Mist fire crossed from the Park into the Shoshone National Forest.[183] On the 25th, the Fan fire was declared wild and a team was ordered. By the 21st of July, it became apparent that the fire situation in the GYA was becoming more complex, increasingly serious, and that need for coordination between units was more intense.

Among those who felt this keenly was Park Superintendent Bob Barbee, who experienced major coordination problems and recognized that the difficulties needed remedy. He related that he called Lorraine Mintzmyer, Director of the National Park Service's Rocky Mountain Region, and explained some of the frustrations and obstacles in a suppression effort

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83 "Fire Reaches Yellowstone," Rocky Mountain News July 25, 1988.

that involved so many assorted entities.[184] Mintzmyer recalled that through her conversation with Barbee "it became apparent . . . that we were not dealing effectively with overall fire coordination" and "there were different answers coming from different forests . . . about the way the policies were being implemented and the way resources were being allocated." Mintzmyer related that it was obvious to her that "there was a need for a more coordinated approach if we were really going to hopefully get control of the situation." On the morning of July 22, Mintzmyer placed a call to Rocky Mountain Regional Forester Gary Cargill and discussed the jurisdictional questions of the increasingly complex fire suppression effort.[185] As a result of that conversation, an Area Command was established on July 23.

Cargill explained that "the Incident Command System has a level of coordination called Area Command. It is triggered at the extent in which the various incidents

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184 Conversation with Bob Barbee, December 15, 1989.

185 Mintzmyer Oral History, .

have grown to the point that they need coordination." Cargill delineated that the decision and authority to establish Area Command came from "the three regional foresters and the regional director of the Park Service." John Mumma, Regional Forester for the Northern Region, and Stan Tixier, Regional Forester for the Intermountain Region, were not available to discuss efforts for improved coordination on the GYA suppression effort, so "after talking with Lorraine Mintzmyer . . . and my regional fire director, Tom Quinn," elaborated Cargill, "we had a conference call with Jim Mann who is Regional Fire Director in Missoula, and with Doug Bird who is Regional Fire Director in Ogden for Region 4." At that time it was agreed that Area Command would provide a higher degree of coordination between units and incidents.[186]

Within 24 hours, Greater Yellowstone Area Command (GYAC) was established. Designated as Greater Yellowstone Area Command by a formal review process culminating in January 1989, throughout the summer

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o6 Cargill Oral History, .

several names were used, including Greater Yellowstone Unified Area Command, Greater Yellowstone Area Command, but most commonly simply Area Command.[187] Jack Troyer, who had only recently filled the new GYCC team leader position, explained that it was called Unified Area Command because it was comprised of representatives of the National Park Service and the Forest Service. "Unified," said Troyer, "refers to the fact that there are two area commanders; they are equal, one is from the Park Service and one is from the Forest Service."[188]

Doug Bird put the difficulty of the task of Area Command in perspective. "We have never within this Region (USFS Intermountain Region)", asserted Bird, "established an Area command situation that coped with as many organizational entities as we did in the GYA this time." It was a coordinating organization that worked for "three regional foresters, one regional Park Service director, and six forest supervisors and two park superintendents." Bird attested that, to the best

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187 Greater Yellowstone Coordinating Committee, "Coordination and Management Review: 1988 Greater Yellowstone Area Fire Situation," (January 1989), 6.

188 Conversation with Jack Troyer, August 24, 1989.

of his knowledge, it "was the most complicated area command that has ever been set up." Elaborating, Bird pointed to area commands established "in California, in Idaho, in Nevada, and in Oregon, where we've handled three or four major fires." But, for the jurisdictional complexity and sheer magnitude, the Greater Yellowstone fires of 1988 had no equal. Past area commands "were always working for one particular forest supervisor or at the most, a couple of forest supervisors or a forest supervisor and a state forester. We've never had anything of the magnitude that we had this year," asserted the regional fire director, "in terms of need for coordination."[189]

Commenting on the importance of a unified suppression effort, Jack Troyer noted that "it would be a real shame to spend a half-million dollars building line on fire A when fire B from another direction will eventually burn into it." Through the judicious allocation of resources as the establishment of area-wide priorities, Area Command provided order to

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89 Bird Oral History, .

what might have otherwise been total chaos. In Stan Tixier's opinion, Area Command was absolutely essential:

> I think Area Command was a very needed and a very successful component of that whole fire management situation, because I just can't imagine how, there were thirteen different major fires as I understand it, and at one time or another, there were probably half a dozen, eight or ten different Incident Commanders functioning and maybe more than that. And for them to be doing their work completely independently would have been just a circus.[190]

From the area of logistics, tactics, and strategy, Area Command, while saddled with obstacles and limitations, provided a degree of cohesiveness. Toward the end of July, the information arm of Area Command loomed large, as another aspect of uniformity provided by the Greater Yellowstone Area Command.[191]

Secretary Hodel's Visit and The Political Arena

Four days after the establishment of Area Command, Secretary of Interior Donald Hodel visited the Greater Yellowstone Area and announced that no new prescribed fires would be allowed to burn under National Park

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190 Tixier Oral History, .

191 Conversation with Frank Mosebacker, August 24, 1989.

Service prescribed natural fire policy. By this point, the Snake complex had forced an evacuation of Grant Village. The recently-ignited North Fork fire was working its way toward Old Faithful, and vigorous wildland suppression and structure protection were in progress.[192] The visit of a prominent political figure and danger to an important national symbol attracted intense media interest.

Hodel's visit, due in part to a request by the Wyoming congressional delegation, had two primary purposes. First, to announce that all new ignitions would be fought from the beginning, and second, to show support for the National Park Service's natural prescribed fire policy and thank the firefighters who were battling to suppress the fires.[193] As it turned out, the media coverage of Hodel's visit focused on the first purpose. His support for National Park policy was

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92 Regional and national press coverage was profuse. For example, see "Yellowstone National Park Fire Burns Near Old Faithful," Great Falls Tribune July 26, 1988; Todd Wilkinson, "Fire Roars Toward Old Faithful," Denver Post July 25, 1988; "Yellowstone Fires Char 40,000 Acres," Montana Standard July 26, 1988; "Yellowstone Wildfire Backs Away From Old Faithful," Washington Post July 27, 1988.

93 Dennee Oral History, ; Anzelmo Oral History, .

not effectively portrayed to the public. This indicated the difficulty of communicating the subtlety of the policy and philosophy of prescribed fire that reoccurred throughout the summer on a variety of issues. When Secretary Hodel announced that firefighters would try to "nip in the bud" any new fires in the Park, it was represented as a change in policy rather than a contingency exercised under that policy. Typical was a headline in the Washington Post which announced that "Hodel Drops Natural Burn Policy; Blazes Cover 88,615 Acres."[194] This portrayal of an abandoned policy produced the impression that, what by now had been frequently coined the "let-burn policy", was an inflexible program that called for the free reign of all fires, regardless of the location or situation. It also contributed to the common perception that the entire GYA fire situation was the product of the prescribed natural fire policy. Commenting on this perception, Bob Barbee asserted that "most of the fires here, a good portion of

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194 Geoffrey O'Gara, "New Fires to Be Fought at Yellowstone: Hodel Drops Natural Burn Policy; Blazes Cover 88,615 Acres," Washington Post July 28, 1988.

them had nothing to do with policy, but they all got thrown into that pot."

Hodel's defense of the philosophy of natural prescribed fire also was lost in the growing "policy pot" perception. The Secretary pointed to the "long-term beneficial effect from fire" and the soundness of a policy that allows for naturally-occurring fires under certain circumstances. When asked for comment, Dave Poncin, the 30-year veteran of the Forest Service who was the initial Incident Commander on the Snake complex, remarked that he was glad there was no full-scale reversal of the National Park Service's policy, and that "it is very easy, when there is a lot of smoke, to react to political or nonbiological information." He continued: "this fire is a natural occurrence and it should play its natural role."[195]

Although fire may be natural in an ecosystem, it is not always natural in a political system. As the summer

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95 Kit Miniclier, "'We'll Fight Any New Fires That Start,' Boss Says as Blazes Char Yellowstone," Denver Post July 28, 1988.

progressed, explanations of the natural role of fire in the GYA fell, to a degree, on deaf ears. As Cargill explained:

> "It was simply too large, too catastrophic, too threatening, too frightening, too costly for people to accept that there was any rational basis for what was happening at all. And I can understand that. I don't care how biologically sound, or scientifically correct a policy is; or how correct a suppression decision might be that isn't full scale aggressiveness, when people are scared, when homes are threatened, when their livelihood is being affected, they want action. People will accept that we might try and fail; what they will not accept is if they believe we don't try.[196]

As the summer progressed the political response to the fires mushroomed as many viewed the fires as a threat to their livelihood. Millions of others deemed them a danger to an important part of their national heritage. It was at the suggestion of the Wyoming delegation that Hodel decided to visit Yellowstone National Park. Barbee, despite often being the recipient of political criticism during the fire season of 1988, was fully cognizant of the political process and its consequences. "The congressional delegations," recognized Barbee, "especially Wyoming" and to a lesser

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196 Cargill Oral History, .

degree Montana, were "just getting hammered to death . . . . The purpose of these individuals (elected officials) . . . in American life and American government, is to reflect the passions of their constituents."[197]

While observing that the political arena impacted the fire suppression effort, Gary Cargill noted much of the political influence was very positive. He said that it gave agencies involved with wildland fire suppression "an opportunity to capture the awareness and the interest for some very positive things." As an example, for several years there had been efforts "to get a bill through Congress that would allow Canadian firefighters and fire equipment to come into this country and help." The bill was never passed because it did not have enough appeal or interest and there was concern about unemployed American citizens. "Well not this summer!", declared Cargill, "as soon as that became something that Congress could do, they did it. So, the awareness and

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197 Conversation with Bob Barbee, December 15, 1988.

interest was not all negative. There were some positive things that came out of it."[198]

Cargill referred to the national fire policy review as another positive aspect of the political interest in the fire season. On September 28, 1988, the Secretaries of Interior and Agriculture established a Fire Management Policy Review Team to, among other duties, "identify issues and concerns which arose during the 1988 fire season" and to "develop recommendations for appropriate changes in fire policy."[199] Cargill said, "I think the fire policy review . . . will strengthen policy and strengthen the subsequent actions a great deal. I think the agencies had drifted into some complacency, into some very high risk decisions that were unwarranted and not in public interest." The regional forester was optimistic that the review would cause the agencies to "step back and put these plans into much better condition" to allow them in the future

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198 Cargill Oral History, .

199 U.S. Department of Agriculture/U.S. Department of Interior, Final Report on Fire Management Policy, (Washington, D.C.: May 5, 1989), 2.

"to manage fire much more responsibly than would have been the case absent in an event of this magnitude."[200]

More than 2 weeks before the formal arrangements for the establishment of the Fire Management Policy Review Team, Secretary Hodel returned to the Greater Yellowstone Area on September 10 and announced that Interior's fire policy would be reviewed. Traveling with a presidential commission consisting of Hodel's cabinet colleagues Secretary of Agriculture Richard Lyng and Deputy Secretary of Defense William H. Taft, the Secretary of Interior toured the fires with Wyoming Senators Malcolm Wallop and Alan Simpson, Wyoming Governor Mike Sullivan, and Montana Governor Ted Schwinden. After the tour, the group held a press conference in Cody, Wyoming, where questions on policy and possible revisions were fielded. Senator Wallop expressed his pleasure at the arrival of the presidential commission and promised future fire reviews. At the same time, he inferred that too many decisions regarding the disposition of western fires

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)0 Cargill Oral History, .

came from Washington. Governor Sullivan, most likely reacting with dissatisfaction to Wallop's call for National Park Service Director William Penn Mott's resignation, stated that this was no time for recriminations. The Governor said that "there's a time for fighting fires and there's a time for kicking butts, and this is the time for fighting fires."[201]

The North Fork Fire

Throughout the summer, there were those who questioned the Forest Service's and particularly the Park Service's conviction that it was indeed "the time for fighting fires." For example, the initial strategy on the North Fork fire became the cause of controversy concerning the aggressiveness of the suppression effort. A perception was held by many of the local publics that the suppression effort was not sufficiently aggressive. The specific focus of that perception had several loci--the Fan, the Clover-Mist, to a lesser

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201 "Hodel Says Fire Policy Will Change," Casper Star-Tribune September 11, 1988.

degree the Mink Creek, and especially the North Fork. Yet perceptions associated with a particular site spread to embody a more pervasive, far-reaching attitude that suppression efforts throughout the Greater Yellowstone Area were not aggressive enough.[202]

Arguably the most important ignition in terms of impact on Yellowstone National Park, the North Fork fire was started by a wood hauler on the Targhee National Forest some 200 yards from the Park boundary. Starting on July 22, by the end of the summer the stretching fingers of the North Fork fire would extend northeasterly from well south of Island Park, approximately the midpoint of the Park's western boundary, to near Gardiner, Montana, a gateway community just past the huge Park's northern border. It would threaten many Park developments, including Old Faithful, Mammoth Hot Springs, Norris, Tower, and Canyon, burning a perimeter area of approximately 500,000 acres.[203]

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02 "Fire Officer says North Fork Fire Could Have Been Stopped Early," Casper Star Tribune August 28, 1988; "Rancher, Reporters Interrupt Hodel's Yellowstone Meeting," Salt Lake Tribune July 30, 1988, A7.

03 Greater Yellowstone Coordinating Committee, Review of the North Fork/Wolf Lake Fires, (November 29, 1988), 3.

The gateway communities of Island Park and West Yellowstone would be threatened by the fire, and suppression efforts were eventually split into another Incident Command, the Wolf Lake incident, because of the expanse of the fire.[204]

When the North Fork fire was first observed, it had already reached 75 acres. Resources for initial attack were ordered, including five ground crews, four bulldozers, two airtankers, and smokejumpers.[205] Smokejumpers overflew the fire and tested the wind with streamers, but it was too windy to execute a safe jump.[206] The wind was to the northeast, pushing the fire into Yellowstone National Park. A temporary Incident Command was set up with the Targhee National Forest's Island Park District Ranger, Rodd Richardson, as the Incident Commander. Heavy equipment was soon in place on the Targhee to keep the fire from spreading

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204 Greater Yellowstone Coordinating Committee, Review of the North Fork/Wolf Lake Fires, (November 29, 1988), 3.

205 Interagency Task Force, Phase II Report, 205-206.

206 Targhee National Forest, "Targhee National Forest Dispatch, Initial Attack North Fork Fire," Transcription of audio tape, (St. Anthony, ID: July 22, 1988), 15.

back onto the Forest. Yet, at the time of initial attack, weather conditions did not make rapid advancement to the south likely.

At the end of the first burning period, suppression forces under the supervision of Targhee National Forest personnel asked Yellowstone National Park officials what sort of resources could be committed across the Park boundary. The Park declined the use of dozers and opted for hand crews using "light hand on the land" tactics. In Supervisor John Burns' opinion, that decision was one of two major contributing factors to a growing public perception that the agencies, particularly the National Park Service, were not interested in aggressively suppressing the North Fork fire in particular and the "Yellowstone fires" in general. The second factor was the subsequent lack of "aggressive suppression activity along the west flank of the fire."

Addressing the first factor, Burns noted that Island Park District Ranger and erstwhile North Fork Incident Commander Rodd Richardson felt:

> confident that they could have gotten the dozers around the fire that first night. Distance-wise it would have amounted to about 2 miles of line. The big question is then, when the burning period came on the next day, would it have spotted out and been beyond the line. Would it have been a futile effort? And in the judgment of many folks, it would have been. The judgment of other people is, 'Aw, they could have caught it with a little luck, you know.' So, they can debate that until the cows come home.[207]

Commenting on the second factor, Burns described the obstacles to suppression on the Madison Plateau where the North Fork burned:

> I don't know any way you could have dealt with that without committing equipment, heavy equipment. I don't know if you've flown over that country, but it's big and it's flat as a plank except it's got some canyons and ravines here and there, plus a few meadows. But, by-in-large it's a sea of trees. So, if you're building fire lines and you go very far, then you'd have to build a big safety zone. In other words, doze out an area the size of a football field where people can retreat into it in case things blow up on them. And so you'd end up with a pretty heavy impact upon the land up there, so I certainly understand the rationale of the Park Service of not wanting to carve up the Madison Plateau with heavy equipment.[208]

On the issue of casually committing heavy equipment, Dan Sholly was emphatic. To him, as important as the fire suppression effort was the need "to protect Yellowstone Park not only from the fires but certainly

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207 Burns Oral History, .

208 Burns Oral History, .

from man. In our history, as indicated by most of the large fires around this country, after a few years of the fire going through the biggest scar left is man's impact." Stan Tixier, Regional Forester of the Intermountain Region, reiterated Sholly's sentiment effectively with an anecdote about the Little Abner character, Fearless Fosdick. Tixier explained that Fosdick was a parody of Dick Tracy. In "one particular segment where there was a shipment of poison pork and beans . . . Fearless Fosdick was trying to protect people from eating those poison pork and beans. And the way he protected them," Tixier continued, was when he saw "somebody about to eat it, he'd . . . shoot a big hole in them." Relating the anecdote to the expedience of "light on the land" tactics, Tixier noted that it doesn't make "a whole lot of sense to indiscriminately fight fire with those techniques (heavy equipment) if you've got good alternatives."[209]

Contributing to public perception that fires were not being fought aggressively, Sholly explained, were

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9 Tixier Oral History, .

media "man-on-the-street-interviews" that asked firefighters on the line who "had no idea what the big picture was." The media could "go interview one person who's responsible for 200 foot of line, had no idea what was going on, overall philosophy, impact, fire behavior, or anything else other than the part of the line he saw." From his perspective "he says: 'Hey, if they just let us we could put this fire out'." But "he had no idea that over the hill" another fire was coming his way.[210]

Joe Peterson, a college professor in the winter and firefighter in the summer, brought a different perspective to the problem. In Peterson's opinion, "there was very little vertical communication. . . . Those at my level," continued Peterson, "the lowest level, the 'ground pounders,' felt that very little effort was made to fill us in on procedure and objectives. The result was that often we felt disoriented and irritated at leaders."[211]

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210 Sholly Oral History, .

211 Peterson Oral History, .

Public perception aside, Sholly felt that a major success of the suppression effort was eliminating "Fearless Fosdick" results. Speaking of the North Fork fire and other suppression efforts, Sholly avowed: "I truly believe if we had not held firmly on the use of dozers early on that we would have now over 300 miles of bulldozer line in the Park. The lines would be black on both sides or they would be green on both sides because the fire would have never got to it. I think that's worth a lot."[212]

Unexpected Wind Events

Shortly after the ignition of the North Fork fire and the visit of Secretary Hodel, Area Command held its first major strategy meeting on July 28. All the GYCC supervisors, superintendents, and Incident Commanders attended. The long-term strategy as coordinated by Area Command was approved by the supervisors and superintendents. The line officers were notified that Area Command was planning to assemble a team of

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212 Sholly Oral History, .

nationally recognized fire behaviorists to predict scenarios of what could be expected.[213] The team became informally known as the "fire gods" in certain circles, in a tongue-in-cheek acknowledgment of the team's expertise.[214]

Del Mitchell, the precise and meticulous planning section chief for Area Command, recalled that the fire prediction team:

> under the leadership of Dick Rothermel, was given a few short days to complete this assigned task. The findings and predicted outcome of this team was presented to agency administrators and Area Command officials on August 2. The team felt that the final outcome of the fires were basically predictable. The unknown factor centered around the direction and velocity of the wind. They concluded, considering the time of year, that we could anticipate, at most, the probability of having one major wind event. A major wind event was defined as experiencing a sustained velocity in excess of 40 miles per hour over a duration of a few hours. Ironically, we experienced a major wind event on August 6.[215]

Several more large wind events were in store for the summer of 1988, and, if a pattern was developing, it was a pattern of unpredictability. The fire season continued to burst expectations.

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213 Conversation with Jack Troyer, August 24, 1988.

214 Conversation with Timothy Manns, August 8, 1988.

215 Mitchell Oral History, .

August 20, the exact anniversary of the big blowup of the 1910 fires, gale force winds occurred and earned the sobriquet "Black Saturday." Gusts of winds measuring as high as 75 miles per hour whipped flames and carried burning firebrands far ahead of the fire front. In a single day, the burn perimeter of the Greater Yellowstone fires exploded by one-third. The area of the fires increased from 323,619 to 480,215 acres. The largest gains came on the Clover-Mist, Storm Creek, Hellroaring, and North Fork fires. Two new major ignitions, the Huck and the Hunter, occurred from trees blowing down on powerlines in Grand Teton National Park.[216]

On the 19th, one day before the acute burning period of the 20th, the Boise Interagency Fire Center requested assistance from the Department of Defense to fight wildfires in the GYA to ease resource shortages caused by a plethora of western fires. By the end of the summer, personnel and equipment from the Army, Marines, Navy, and Air Force were involved in the enormous

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216 Mitchell Oral History, .

suppression effort. Requested on the 19th, they were quickly trained and arrived in the GYA on the 21st. Even though the troops were requested before the severe conditions of August 20, the timing of the call for troops made the request appear a desperate response to the holocaust of "Black Saturday."[217]

John Hughes, Deputy Regional Forester of the Northern Region, viewed the military support as a significant contribution to the suppression effort. The troops came as a ready, physically fit, equipped and disciplined labor force. They were effective and reduced the need to recruit and train new firefighters mid-season. Hughes commented that mid-season recruits have almost a 50-percent turnover rate and increase safety risks because of inferior physical training.[218] Regional Forester Tixier echoed Hughes' appreciation of military support. Important to Tixier was the fact that the military troops "were physically fit and they were well equipped, well supervised, and disciplined.

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217 Jim Robbins, "Forest Fires Rage in Western Parks: Yellowstone Has Its Worst Day--Army Sending Troops," New York Times August 22, 1988.

218 Conversation with John Hughes, December 19, 1988.

Solving many recruitment problems, all the firefighting agencies had to do was "teach them how to fight fire and they learned very fast and they became very effective early on."[219]

Significantly, the military came prepared and accustomed to observing safety procedures, contributing to an excellent safety record. Doug Bird noted that, overall, accidents on the GYA suppression effort were notably lower than normal. "Agency safety was superb. The rates were significantly lower than comparable situations per person or hours worked."[220] In the opinion of Bob Barbee, the safety record was nothing short of amazing given the "potential to kill a whole bunch of people here, not just firefighters but public." Barbee explained that there was "a great deal of emphasis put on keeping Yellowstone open early on. . . . The easiest thing in the world is to say we've got a big event and we're just going to close this place down." But, "you just don't close a place the size of

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219 Tixier Oral History, .

220 Bird Oral History, .

two small states down overnight. . . the consequences are incredible."[221]

Speaking of suppression forces, Dan Sholly noted that "they were tired when they got here, they were tired when they were here, and they were tired when they left. The fact that we still didn't have major accidents is absolutely amazing." He thought that it demonstrated that the "years and years of getting it beat into all of our heads . . . that safety is first" really paid off.

Each of Area Command's daily briefing notes reminded staff that safety was the number-one priority. On August 26, only a week since the arrival of the military troops, Area Command organized a meeting of the supervisors and superintendents of the GYA to address the question of priorities in the allocation of resources. The Boise Interagency Fire Center had informed them that some resources would have to be pulled off the Greater Yellowstone suppression effort. At that meeting, the Area Commanders, with the input of

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221 Conversation with Bob Barbee, December 14, 1988.

Incident Commanders and line officers, decided upon a broad strategy of protecting life and property and holding onto what was secure.[222] In essence, a fourth "C" was added to the strategies of fire suppression. To the traditional control, contain, confine, was appended "cut losses." Efforts concentrated on structure protection and the safeguarding of communities and protection. In light of finite resources, this strategy proved prudent as, between August 26 and the first snow, firestorms threatened Old Faithful, Mammoth Hot Springs, Norris, Tower, and Canyon. Eight communities were in danger, several of which were evacuated as a precaution.[223]

Despite unprecedented fire behavior and resources in need of protection extending across three states, remarkably few structures were lost. Bob Barbee viewed it as practically a "string of miracles" in combination with top-flight professionalism. Cargill echoed this

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22 Greater Yellowstone Coordinating Committee, "Coordination and Management Review," Appendix, 3.

23 Greater Yellowstone Coordinating Committee, "Coordination and Management Review," Appendix, 4.

sentiment, noting that "there were some outstanding examples of firefighting done to save structures, save lives." He thought that much was learned "about fire suppression in extreme conditions [and] about saving communities in extreme conditions. I suppose history will focus on what was burned," mused Cargill, "but what I hope that people would recognize is that there were some heroic actions on the part of the fire teams and the firefighters . . . and there were many more resources saved than there were burned--structures, historic buildings, people's homes."[224]

By September 6, the Storm Creek fire, in concert with the August 15 ignition, the Hellroaring fire, advanced briskly toward Cooke City and Silver Gate--small gateway communities located on the far northeast corner of Yellowstone National Park. On the 7th, the fires, driven by high winds, crowned out and destroyed several structures in the area east of Cooke City. That same day to the south in Yellowstone National Park, the North Fork fire made a major run on

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224 Cargill Oral History, .

Old Faithful. Several structures were lost, yet the vast majority of the buildings, including the historic Old Faithful Snowlodge, were preserved from a horrific firestorm.[225] September 8 saw the Wolf Lake fire approach the Lake, Tower, and Canyon developments in Yellowstone National Park. Structure control efforts were successful, but the 9th and the 10th also experienced hard runs on developments but losses were minimal.[226]

September 11, firefighter Joe Peterson gleefully recorded in his journal: "snowed all morning." Peterson felt like, "Okay, if we can't do it, by damn Mother Nature will." From that point, incident management teams gradually demobilized.[227] By September 16, most Class I teams left the GYA, their incident responsibilities either turned back to the parks and forests or to a Class II team.

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25 Interagency Task Force, Phase II Report, 93.

26 Interagency Task Force, Phase II Report, 216.

27 Peterson Oral History, .

Presidential candidate Governor Michael Dukakis visited the fires on September 15. It was generally agreed that, as a campaign effort, his trip was mostly wasted.[228] The enduring fires of the Greater Yellowstone Area took a back seat to the shorter-lived Hurricane Gilbert, and the Dukakis campaign suffered accordingly. Although snows had far from extinguished the flames and final control was still nearly a month off, interest in the fires was gradually slowing concomitant with the dousing of the flames.

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228 Mike Males, "Dukakis Views Damage: Candidate Avoids Stand On 'Let It

CONCLUSION

As the fire season of 1988 ended, tension gradually subsided. Residents of Gateway and other local communities ruefully contemplated their losses. The public media wound down, running stories that focused on specific interests or consequences of the fires. Various evaluating teams hurried to assess the fires and size up their administrative meaning. Scientists, in the agencies and at universities throughout a broad orbit surrounding the Greater Yellowstone Area, stepped up or refocused their research, and fire-related symposia flourished.

Historically, it was, and is yet, too early to fully assess the fires of 1988. Nevertheless a few immediate implications may be offered. Some of these were obvious in the natural order of larger events unfolding, and with modification and elaboration seem likely to stand. Others, more short-range in character, are suggestive,

perhaps even evocative, their purpose more a step in debate than mature viewpoints.

In the first place, it is clear that the GYA's place at the continental eminence of the Nation has once again given it a visibility in the West. Prosaic in character, it looms in mind and imagination readymade, like fire events themselves, to enter popular consciousness. A heritage exploited by media and politics alike, the vividness of this imagery drove itself even deeper into the national consciousness during the 1988 fire season. This resulted in dimensions of new understanding and interest in the long-term scientific and ecological meaning of wildland fire. It seems safe to project that the GYA will continue to feature prominently as a region, giving disproportionate meaning to local communities, area businesses, and administrative agencies.

The role of the upper Rockies as a significant factor in the evolution of fire policy seems also to be assured. The 1988 fire season takes its place among related events hinted at in the growth of forests starting 100 years or more ago when the cycle of storing

solar energy began anew. More direct is the 1988 fires' association with the memory of fires such as those in 1910 or 1934 or even as recently as 1979 or 1981. From them came new directions, new policies, new truths. From the fire of 1988 may come other policies and other truths that, like the earlier ones, will guide official and popular values for a time. Especially important in this context is the role of the fires as a lure of public attention. Generations tuned only to Smokey the Bear and man's capacity to control have now been introduced to prescribed fire, to "light on the land" philosophies, and a new fire organization.

Perhaps most emphatically of all, the fires of 1988 make clear the dominant role of natural conditions. Weather, long-term and short-term, was direct in its consequence. While conditions of drought, temperature, and wind held, the fire raged. When the conditions they spawned subsided, the fire was controlled or ran its course.

In the short term, other considerations seem apparent in the foregoing pages and the oral histories upon which they depend, as well as in the general

official and media record of the fire season. Great overriding insights that will control general policy for a generation or more are not recognizable at this point. Perhaps the events are yet too close, their imminence too great for the significant to be sorted from the useful or even mundane. Or, perhaps dramatic new departures are less in the order of the technological age. But again, suggestive relationships exist. Important among these is the fact that resource management, including fire management, is still evolving. Understanding is finite. It seems even clearer that among the things only imperfectly understood is management's impact on a large area of interrelated natural phenomena. In this context it seems warranted to conclude that land ethic advocate or "light on the land" policies are validated.

Institutions, such as the Incident Command System, are also validated in a complex situation of interagency, interstate, and even international cooperation and coordination. While coordination required a high level, there seems to be room for the values and operating modes peculiar to the mandates and

traditions of the various wildland fire agencies such as the Forest Service, the Park Service, Bureau of Land Management, Bureau of Indian Affairs, and state forestry agencies, and those less directly impacted like the armed forces and neighboring nations. The difference in style and mandate were particularly apparent in the way events unfolded on Yellowstone National Park and the Targhee and Bridger-Teton National Forests.

This project's oral histories generally confirm that the administrative machinery of the Incident Command System and the Greater Yellowstone Coordinating Committee did more to relieve intense personal pressure for officers of the national forests than for those in the national parks. At first examination, this appears to be institutional and implicit in the mandate and experience of the two agencies, but it might be a factor of personal characteristics as well. Whether broader research would cast doubt, the present use of oral histories and personal conversations suggests greater and more administrative stress in the National Park Service, but at the same time it was a stress that, as

it appears here, enhanced clan and professional pride in the outfit.

An immediate lesson is the use of efforts to coordinate and cooperate in handling fires and other catastrophes. Administrative cooperation in the GYA has existed for years, and an intensified or formalized trend has been in process for at least a decade. The Greater Yellowstone Coordinating Committee had progressed nicely through Phase I to aggregate management plans for the units of the GYA. Phase II was yet to be implemented as the fires of 1988 struck. The experiences of the summer of 1988 validated the need for this type of effort. The fires necessitated close working quarters and cooperation between the national parks and national forests of the Greater Yellowstone Area. It is the work of future historians to determine whether the process helped to draw elements together or if the stress of the situation served to pull them apart.

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Appendix A: Chronology of Significant Events

June	Appointment of Greater Yellowstone Coordinating Committee Team Leader, Jack Troyer.
June 19	Storm Creek fire reported in the Custer National Forest.
June 20	Storm Creek fire classified a prescribed fire.
June 23	Shoshone fire reported in Yellowstone National Park and classified a prescribed fire.
June 25	Fan fire reported in Yellowstone National Park and classified as a prescribed fire.
July 3	Storm Creek reclassified a wildfire by Custer National Forest. Incident management team ordered.
July 9	Mist fire reported in Yellowstone National Park and classified a prescribed fire.
July 11	Clover fire reported in Yellowstone National Park and classified a prescribed fire.
	Mink Creek fire reported in Bridger-Teton National Forest and classified a prescribed fire.
July 14	Mink Creek fire reclassified a wildfire by Bridger-Teton National Park. Incident management team ordered.
	Yellowstone National Park organizes incident management team.
July 21	Snake complex and Clover-Mist reclassified a wildfire by Yellowstone National Park. Incident management team ordered.
July 22	North Fork fire reported in Targhee National Forest. Crosses border into Yellowstone National Park. Initial attack efforts hampered by high winds. Incident management team ordered.
	Officers of Greater Yellowstone Coordinating Committee meet.

	Wyoming Senator Malcolm Wallop flies over Mink Creek with Forest Supervisor.
July 23	Greater Yellowstone Area Command established.
July 23-31	Snake complex threatens Grant Village forcing evacuation of the development and road closures. North Fork fire threatens Old Faithful--regional and national media coverage increases.
July 24	Mink Creek fire crosses from Bridger-Teton National Forest to Yellowstone National Park.
	Clover-Mist fire crosses from Yellowstone National Park to Shoshone National Forest.
July 25	Fan fire reclassified a wildfire by Yellowstone National Park. Incident management team ordered.
July 27	Secretary of Interior Donald Hodel visits Yellowstone National Park. Announces no new prescribed fires would be allowed.
July 28	Officers of Greater Yellowstone Coordinating Committee meet.
August 3	Officers of Greater Yellowstone Coordinating Committee meet. Team of nationally recognized fire behaviorists to predict scenarios of what could be expected. Worst case scenarios exceeded in 3 days.
August 15	Hellroaring fire reported in Gallatin National Forest. Incident management team ordered.
August 20	Gale force winds push flames past containment lines. New fires ignited and burn perimeter increases by one-third.
	Officers of Greater Yellowstone Coordinating Committee meet.
August 24	Hellroaring and Storm Creek fires cross into Yellowstone National Park.
August 25	North Fork fire split into North Fork incident and Wolf Lake incident.
August 26	Officers of Greater Yellowstone Coordinating Committee meet with Area Commanders and Incident Commanders. BIFC notifies Area Command of resource constraints. Long range strategy of protecting structures and securing gains approved.
September 4	Officers of Greater Yellowstone Coordinating Committee meet.
September 6-7	Cooke City and Silver Gate, Montana threatened by Storm Creek and Hellroaring fires.
September 7	North Fork fire makes a major run on Old Faithful.

September 8-10 Wolf Lake fire approaches Lake, Tower and Canyon developments in Yellowstone National Park. Gardiner and Jardine, Montana, are also threatened.

September 9 Officers of Greater Yellowstone Coordinating Committee meet.

September 10 Presidential commission consisting of the Secretary of Agriculture, the Secretary of Interior, and the Deputy Secretary of Defense tour fires with Wyoming Senators, the Governor of Wyoming, and the Governor of Montana.

September 11 Season's first snow.

September 16 Class I incident management teams demobilize. Fires turned over to Class II teams or back to unit.

September 20 Officers of Greater Yellowstone Coordinating Committee meet.

September 28 Secretaries of Interior and Agriculture establish a Fire Management Policy Review Team.

October 1 Officers of Greater Yellowstone Coordinating Committee meet.

Appendix B: Oral Histories

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Interviewee: Joan Anzelmo, Public Affairs Officer, Yellowstone National Park, Mammoth, Wyoming.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 15 December 1988

DP: Okay, we're with Joan and as we've heard we're being taped here in Joan's office in Yellowstone Park and it's December the 15th. Okay, first off, the contract specifies that one of the sections I need to cover is the public reaction to fire management strategies and then the influence that reaction had on subsequent decisions as events progress. So I guess, maybe an easy way to get at that is to first talk about the media interest, when they were interested, what they were interested in and the volume of interest.

JA: Okay. Things sort of started out slowly. And in June, you know, we had one very small fire burning in Yellowstone which was the Fan fire and it was meandering around smoldering not doing a whole lot and even though we were giving daily reports to our local news media on the Fan fire, there was not a great deal of interest because it was nothing out of the usual. It was similar to what had happened here in years past with early fires in June, pardon me, that we fully expected to go out with subsequent rainfall. Of course, you know, as the history is writing now, we didn't have rain or we had no significant rainfall. We moved into July, more fires had ignited by lightning in Yellowstone and also outside of Yellowstone in surrounding forests. And by the middle of July it was becoming increasingly more clear that we were in unprecedented conditions that the weather was going to remain in drought conditions with no rain. And on top of that we began to experience major wind events, as we described them, where we would have days that the wind, it seemed to be more windy every single day but we started having winds of sixty and seventy miles an hour about every ten days. Which began to make these fires blow up in very dry conditions. Specifically around July 13th or 14th we had what we describe as the first major wind event, things took off in the south of Yellowstone with the Red and Shoshone fires when they became a direct threat to Grant Village and so the media began to pay attention to the fires in Yellowstone. And by the following weekend, around July 21st or 22nd, 23rd, we had moved into an extremely serious fire situation in the Park and in the surrounding area. And two overhead Incident Command teams were in place in Yellowstone and another one was on it's way. The Area Command had set up and so we went from essentially a very low key public information operation vis-a-vis the fires to overnight a full blown, nearly twenty-four hour day response on the fires. As we look back at that, things were happening so fast and our own public

information office in Yellowstone at Park headquarters became sort of the central information office for anything to do with fires on Yellowstone and, frankly, on the adjacent fires. And we were not equipped at the start of that increased demand to deal with everybody. I mean, we had three people in this office trying to work eighteen and twenty hours a day and responding to everyone. And we were sort of caught unawares of what to expect. You know, again, the fact that the fire crisis was growing and growing. As that grew and more people came in it would obviously become major media event. So we quickly put into place, within our own agencies several people were requested. They were requested to come to Yellowstone to work at the information office and headquarters to serve as media spokespeople and then other people were detailed from other jobs in Yellowstone to serve as information people for many public phone calls that we were answering. At the same time, as the Incident Command teams came in they traveled usually with a fire information officer and additional fire information officers. But sort of a lead fire information officer and then some others. And we also tried to assign a National Park Service employee in Yellowstone to each fire information officer or each incident commander to serve as a Park Service spokesperson in the field. Access became difficult in the Park and, of course, it was imperative to have field people at each fire camp and each fire front, if you will, to assist the media with their access to those fire spots. And so that mobilized fairly quickly and during the course of July, August and into September, we had something like a total of sixty-five field fire information officers working in Yellowstone and in the immediate adjacent areas. And they were comprised primarily of U.S. Forest Service personnel and also National Park Service and BLM (Bureau of Land Management) personnel. The majority of those people and all of the Forest Service personnel had full fledged fire information officer training. At Mammoth, we had thirty-four different people working in our center information office during that same period of time. Not all thirty-four worked at the same time. We operated the Mammoth information office from six A.M. 'until twelve midnight seven days a week. And then at midnight, excuses me I'm having a rough voice today, we would provide our communication center which operated twenty-four hours a day with a media stat sheet that they could read to the media that would call between midnight and six A.M. and what the latest stats where on the respective fires. So, we essentially had twenty-four hour coverage one way or the other. Lets see, one of the things that we've heard over, and over again now, or as you look back at some of the fire documents and the news stories and so on. People globbed onto the word early in the fires of the so called "let burn" policy. And no matter what we did locally at the Park, from the superintendent on down, to change that perception that we did not have a simple "let burn" policy, we had a fire management program and within the frame work of that program we did have fires that were allowed to burn under certain conditions. The media only wanted to use the more inflammatory headlines and statements regarding "let burn" policy. So it was a sort of a losing battle from the start to turn around the perception that Yellowstone was simply operating with the policy that allowed all fires to burn under all circumstances. And there were a few reporters that took the time to tell that story correctly, but most just used the Yellowstone lets fires burn kind of headlines. The other thing that occurred was with the acreage, you know, we had daily updates on how much acreage had burned each day or that day or the previous day. And we

qualified each acreage thing with a statement that said this acreage is a perimeter acreage that not all areas within the perimeter burned, but over and over again the media only chose to report the total acreage. Occasionally you would see a story that would qualify that the acreage was perimeter, but primarily it was a hundred thousand acres burned today, or two hundred thousand acres burned today. And of course, now that we've done the studies much less acreage actually burned than the media led the public to believe. So, that was another difficult perception to turn around. We're getting good, good, stories on it now, but during the heat of the crisis, we couldn't get that printed. And I think, too, that the public at large, national and international publics that followed our stories had a sense from the media coverage that Yellowstone simply burned up, that there's nothing left. So we're working very hard now to try, with the travel commission, travel industry, and a variety of sources, to turn that perception around and try and let the world know that Yellowstone is still here and that all primary features that we associate with Yellowstone such as Old Faithful, the Grand Canyon of the Yellowstone, etc., are still here. The wildlife is still here and that you can still have a wonderful experience in the Park and understand the role the fires played here, you know, and the role nature plays here all the time. So those are three things that we started off with particularly the "let burn" part, moving into the perimeter acreage problem, and then the perception that the Park has burned up. So those are three big ones that have been challenges. And then there's been literally hundreds of smaller issues that came out of day to day fire situations that became media events. And I think that just happens. There were ten thousand firefighters in this Park at one time, five or six incident overhead teams, an Area Command, you know, lots of officials floating in and out, and lots, and lots, of rumors in all of the communities. And enough though there were people in those top positions such as the incident commanders makin
g decisions, a lot of time the front line people weren't aware of all those decisions and they would go into a town on their time off and spout their mouth off and then the town would believe what the rank and file firefighter said. And then the incident commander couldn't turn that story around or something. So, things like the Park would not allow bulldozers. We allowed bulldozers on every fire from the start and the superintendent of this Park in the delegations of authority to the incident commanders just said that, you know, bulldozers would be allowed for the protection of life and personal property and all the superintendent asked was that we be told or be advised that bulldozers were needed. So, that was a misperception that the media, over and over again fueled with the public. And there was another one about the pilots that were flying the helicopters being restricted on where they could dip their water buckets. And they virtually had no restrictions on any of the river streams or lakes in the Park anywhere. There were some restrictions placed on them in some of the more fragile thermal pools themselves and even though we asked that they not dip into those primary thermal pools, at times the emergency was such that they also dipped into the thermal pools. So, the thought that we would restrict going into lakes, streams, or rivers was ludicrous, you know, we never did that. And the records and documents show or substantiate these things. But those kind of things had inflammatory headlines frequently, "Park Disallows Us of Streams", or something like this. Well, those were hard to live with. Am I going in the direction you need?

DP: Yeah, that's right. What do you think the basis of this confusion is? Was it a lack of understanding by the media themselves of the complicated rather than simple nature of these events?

JA: I think there are so many factors that contributed to, yes, the confusion. This was an incredibly complex event, you know. In a wild area, in a remote area, in a place where some of these fires were very inaccessible. A lot of the people that were sent out to cover these stories had virtually no fire knowledge or fire experience in their past stories, nor did they even have outdoor experience. So that we were getting a lot of people that were urban reporters, pardon me, trying to cover, you know, some of the most extraordinary natural events of the century right here. And then on the other hand we had people that were very experienced. So, it wasn't that every single person, but that contributed, was the lack of understanding of the area, the terrain, the size of the Park, how you got here, how you, you know, how to travel to get your story out. The fact that there weren't always telephones working or there was not satellite transmissions available. And even though that's typical for some of the major media who travel all over the world to remote locations, we were descended upon by virtually every news group in the country. And in estimating the media contacts that we had by phone and in person from mid July to September, through the middle of September, we estimate that there were three thousand media contacts, and that would include commercial filmers, photographers. So, when you're dealing with that volume of people you're dealing with a true crisis situation, lots of confusion, you know, distances, remote locations, it is hard to get the story out. Here at headquarters we were able to provide updates usually twice a day, the media became accustomed to contacting us in the mornings and in the evenings for the fire updates. And at different times Area Command, which was set up then closed down, then was reset up again, had an excellent information center set up over at West Yellowstone. But they were, while they were providing awful lot of information to the people locally, the community and the media began to know that they were there, they weren't able to provide that national central role, at least in my opinion. Because Yellowstone's name was used in everything even when it was a fire outside of this Park, and our phone number was what people found, I mean, everybody was calling Yellowstone. We think we assisted about five thousand public inquiries by telephone from mid July to early September just on Park questions, you know, can I come, where can I stay, I heard the Park was closed, you know, and those kind of things. So, our information role here was, of course, concentrating with the media, the responsibilities there, but also with the public at large.

DP: You mentioned, I can't remember the exact numbers, sixty-five field fire information officers. Now were they integrated with the Incident Command System?

JA: Yes. The each incident commander usually came in with a lead fire information officer and some additional fire information officers. So, one fire camp may have five or six fire information officers with one person being the lead. And they were associated with the Incident Command. Now we did, each time a new team came in, I usually met with the incident commander, we explained about the role that we were playing in the headquarters and particularly our concern over the fire policy, the way the fire policy stories were coming out. And we did check in daily with each fire camp information center or they would check in with us daily. So there was communication between our headquarters office here

and each field location when there were phones available and Area Command as well. So that we were trying to have sort of a unified effort, recognizing that the field people had to operate independently a lot of the time, but that we needed to be sharing information and letting each other know what was going on.

How was that coordination effort? Was there pretty much a uniformity of information?

It fluctuated so much depending on what was happening with fires and the group of people that were in there at a given time. Because those fire information people of course, turned over just as fast as firefighter do. They have a fourteen or twenty-one day stint and then they are relieved. So, a lot of times we would find just about the time we had a system working exceptionally well, where we felt that everybody knew what was going on, and what contacts we had to make each day, what information we had to share, then new people would come in and we'd have to start all over again. Cause of course, at headquarters we were the same group of people essentially the whole time, where as at the field locations and at West Yellowstone's Area Command those positions did rotate. And there were, certainly again, there were mistakes made, there were things that all of us could have done better at different times, but I think, we got so quickly into one, a crisis, and then a reactionary mode. You know, there was no time for perfect planning, it was you do it the best you can you try and get this information we were trying to get information on fires. Well at one point there were ten fires that we were trying to report on each day. And just trying to get that information from the computers when it was available or from the field camps themselves was quite a challenge.

How 'bout the how to phrase this, there were a couple trips by various secretaries and also a presidential candidate.

Others.

By whom and how were these handled?

Well the very first one was a visit by Secretary Hodel who is of course, the Secretary of Interior. He came on July 27th shortly after the fire situation had gotten quite intense both in the Old Faithful area and in Grant Village. And his reason for coming was to assess the fire situation himself, you know, to look at the fires personally and to thank the firefighters. Locally here at Yellowstone our office was responsible. I was personally responsible for setting up the press conference for Mr. Hodel's visit on July 27th. And frankly, that one went quite well, I mean, it was fairly organized, because we were only dealing with our own agency, our own department. We had a good flow of information before his visit to know what to tell the news people in advance, like when he would come, where he would be, how we would set it up. And so we had again what I perceived to be a very orderly news conference. The media waited until Mr. Hodel landed. We had two spots that where going to possibly be used, he chose the first spot which where the media was already a centered. He made some statements, he talked about what his impressions were seeing the fire, he thanked the firefighters and he did announce that we would fight all new fires for the rest of the season, that we would not allow any fires to burn. Shall we keep going.

Yeah.

Okay. And so we had about, I think we had about eighty media people at that press conference, you know. I'm sort of trying to remember in

mind here how it looked and so on. But the National Park Service organized that one and again in my opinion that was very organized and it went over fine. It accomplished what Mr. Hodel wanted to do and the media got there stories. Then as the summer wore on and the situation got more intense and as you know, as you look at either news articles or other things everybody was getting in on the act our here. I mean politicians, dignitaries, everybody wanted a piece of the action. And then at one point, toward the end of the, I guess that maybe at the height of the fires, the President decided to send out a Presidential Commission which included Secretary Hodel again, Secretary Ling of the Department of Agriculture, Assistant Secretary for Defense, Taft, and then three governors, Governor Schwinden from Montana, Governor Sullivan from Wyoming, and Governor Andrus from Idaho. And they all came on a joint Presidential Commission again to look at the fire situation and to see what was needed here, what other things, what other resources, what other people might be needed and also to talk with some of the communities about what was going on. Now that press conference was orchestrated through Area Command. I mean that was, Agriculture at the Washington level had the lead and the U.S. Forest Service at the agency level had the lead on that press conference which was awkward because the whole thing was essentially going to be staged in Yellowstone. So, from a recollection stand point, we did not organize it. On the other hand, I think that generally that went well in that there was, you know, good facility at West Yellowstone that was used. The group took a tour on a bus, went into Old Faithful and nothing had been arranged for them at Old Faithful. So as we were approaching Old Faithful it was growing a little awkward and Secretary Hodel turned to Superintendent Barbee and said well what should be do now. Of course, we again had not had the responsibility for setting it up so we're sitting here saying well we wished we had known we needed to do this. And so Bob took the group out of the bus and lead then around the Old Faithful area looking at the things that had burned and what was going on immediately in the Old Faithful area. Now at that location, it was very much sort of a media bust, I mean, everybody was fending for themselves. There was a separate media bus, they basically ganged up around Secretary Hodel and did the, you know, sort of media swarm around the primary dignitary. And so in retrospect, I'm sure that the media were not pleased with how that press conference went because it wasn't organized and they didn't have good information and they didn't have good access to the VIP's and it was a bit of pandemonium upon arrival at Old Faithful. And from an evaluation stand point, you know, I don't feel that we're responsible for that because we really didn't have a hand in setting anything up. We did the best we could with what we had and then we went back to the town of West Yellowstone where town meeting was held. Again, organized by Area Command, and the respective dignitaries made statements to the townspeople gathered and the media. And I don't think they took questions, maybe a couple of questions were thrown out. There was some booing from the audience, they were dissatisfied with some of the statements that were made. In particular, Mr. Hodel assured the group that the North Fork fire had been fought from the beginning, which was always a misperception that you know, every fire in Yellowstone had been allowed to burn, of course that's not true. And the audience booed at that comment showing you a sense, again, when you look public perception, that the public simply didn't believe that even though the documentation exist to prove that. So, that was, you know, again something that I'm not

sure you want. And the there were two other sort of dignitary press releases. There was a small one that actually preceded this one with the multiple cabinet officers and that was Senator Wallop came in to Yellowstone and right now I can't think of what date that was, but again, it was before this, I believe that was in August. He wanted to see the fire situation for himself, he held a small press conference at the Madison Fire Camp, the North Fork Fire Camp. And at that time, he echoed some very positive statements about what the firefighters were doing and that he thought everything was being done possible and so on. And then a few short weeks later, those opinions of his seemed to change in the press, you know, as you do your research, David, I mean it's kind of interesting thing. You take my name out of this. And then let see, the last and big one, which was sort of a fiasco, was when Mr. Dukakis came out on a visit while he was presidential candidate he traveled with the governors from all three governors again I think. Wyoming, Montana, Idaho and Colorado, yeah. And that also was a strange one where here the things was being entirely staged in Yellowstone National Park but the contacts had been made with the Gallatin National Forest in Bozeman, Montana. And the public affairs people in the Gallatin took on this press conference and media event without involving us very early in the stages. So that quickly became awkward. And we voiced some complaint about that to the Dukakis people in their eventual phone calls to us saying here you are coming to Yellowstone National Park and you haven't even contacted us. And that's highly unusual, Yellowstone hosts dignitaries every year since the history of the Park, I mean you know, so it was highly unusual to have Forest Service personnel coming into Yellowstone to set up a presidential candidate visit. So again, if your looking at the history of it, which I'm trying to be honest with you, that was a very awkward thing. As it turned out in a last minute scramble the day that he was arriving, a couple of our supervisory rangers that were on the west side were dispatched to the area that the Forest Service was setting up a press conference and they ultimately worked out all the details about where it would be and how it would be done. And actually that may have been the day before. That was probably the afternoon before because the event actually started pretty early the following morning. And then the event actually went fairly smoothly once everything got started. Mr. Dukakis just asked for a briefing and the area commanders did a briefing with the superintendent about what the fire situation was. He expressed empathy for the firefighters and what the Park was going through and was not critical at all in his statements. And so that was sort of the wrap up as I recall of our dignitary visits and you know, press conferences.

DP: You mentioned the Gallatin's information office, I guess is the term you use in the Forest Service. Information was coordinated several ways, it seems, you have your operation here which obviously is the public affairs for the Park which is . . .

A: Which is year round.

P: . . . which is certainly the major focus of the attention. And the there was something related with Yellowstone command, with Area Command . . .

A: Right, right.

P: . . . but also there's various information offices and public affairs offices of the . . .

A: forests.

DP: . . . of the forests of the members of the Greater Yellowstone Coordination Committee. Was there an informal coordination between those various . . . ?

JA: You know, there really wasn't. We were calling, our office in the early stages, was calling each of the surrounding forests, all the chambers of commerce, Grand Teton National Park, and trying to advise updates of what was happening in the Park. Because of lot of those offices get questions about Yellowstone there on the approach routes to Yellowstone. So if they see a flag, and it says Forest Service they stop and say what's happening in Yellowstone. So we did make a pretty big effort in the beginning to call all those locations as well as the forest district office. Because, as a matter of fact, like for instance in the Shoshone, the district office that's in Cody, or excuse me that's in the Wappity Valley on the way to our east entrances is one that people stop at all the time. So we sort of identified those real frequently used Forest Service district offices and we called those. Not every forest has a public information office in the immediate area, many of them do. I would say that our communication was greater with the Gallatin because we do tend to work, you know, a lot together and the Gallatin has district offices in Gardener and in West Yellowstone. So while I think we communicated well with, locally at that level, there was not a concerted effort at the park and forest level to be doing a whole lot. I mean, I think, part of it was everybody was so busy trying to cope and a lot of the public affairs people at the forest level were dispatched to fires, you know. As a matter fact, at one point we tried to see if Betty Schmidt from the Gallatin could come and work here as a fire information officer, she had already been sent to Missoula to do the same thing. So, that was going on. Now at the regional level, there are the three regional foresters of these regions, what is it 1, 3, and 5, or something?

DP: 1, 2, and 4.

JA: Okay, and their public affairs people and our public affairs person in region, I think, were communicating throughout, you know. You probably know, well obviously Patrick Sheehan who isn't that where your under that . . .

DP: Yeah, right.

JA: . . . yeah. Patrick, Denny Bschor in Denver, Beth Horn in Missoula, and then Marsha Karle is our person in Rocky Mountain Region. So, I think that they at that level were communicating. But, at the park and forest level, other than those routine phone calls that we were making to advise the reception areas of what was going on, there wasn't a great concerted effort. Also, in the beginning, our office was also talking quite a bit with Fred Kingwell, the public affairs person on the Bridger-Teton. Because in the early stages, it was sort of the Mink fire that was really the only big fire outside of Yellowstone where there was a need to be talking back and forth. So, you know, so probably we should have been doing a better job that way. But, as I think about those days and those nights that went on and on forever. I'm not just sure even with the best of intentions whether, as you react to crisis, whether you would have taken the time to pick that phone up an extra time and make that phone call. And people couldn't get through to us, our lines were stacked, busy, we didn't have enough phone lines. So, you know, we probably didn't do enough that way, but I'm not sure it would be different again. I just really don't know.

DP: I don't know if this is a question that will be easy to understand what I'm asking, but, comment on the sense of crisis and the fact that it, you know, you were putting in such long hours and the fact that there was such an exciting, you know, so much activity around. How did that effect peoples attitudes that you came in contact with? Say kind of what they were and how they seemed to you as far as their attitude.

JA: I think in the beginning people really geared up for the crisis. And we all were, you know, we weren't stopping to think about the hours, it was just here is an emergency, we all react. I mean, the Park Service is a organization that is very used to reacting to emergencies. I think no one could envision though that this would turn into a full blown crisis and that it would go on forever, and ever. I mean as the summer wore on, a lot of us, you know, we felt like zombies, we were living a nightmare that didn't end. You know, it felt like the end of the world. I mean, you couldn't believe that you have to keep going on day after day, week after week and what turned out to be month after month. So, in any crisis situation, you gear yourself up, your ready to go and for a couple of weeks you just kind of running on adrenalin, and your not too concerned. But, as it wears on, you reach one more case scenario and you exceed it and you reach and other worse case scenario, it was really a daunting job here this summer. And, of course, the public perceptions, which we feel in many cases were misperceptions, helped to contribute to their, you know, their unhappiness. And they aimed such criticism and such venom at the Park and Park employees. Then on top of all this fatigue, you had given up your entire summer, virtually just given up your entire summer to help Yellowstone. And then you had all this criticism at the personal level leveled at you, it was very hard to take that, you know. To be honest with you, everybody here is worn out, I mean, they are really, really, worn out and the media interest has not let up so that we're still dealing with, you know, twenty-five or thirty pretty major media each week that are doing follow up stories. And we have two in here today, one is Newsweek doing a very extensive story that's going to be a six month study before they publish the article. And another one is Atlanta Constitution or the Atlantic Journal Constitution which is the daily and Atlanta. And then of course, our normal local and regional ones. We're maintaining that level. Back to your other question. I mean as things really heated up, the people that were in critical positions and there are many, I mean, you know, across the board. They went into things where, you know, people were working twenty hour days, eighteen and twenty hour days, day after day, after day. And in a couple cases when some of those early evacuations occurred, people worked twenty-four hours for a couple of days in a row. And people went into those shock syndromes after they got off and then couldn't sleep. You know, it was like you were so wound up from what had been going on and even though you were desperately tired your body couldn't relax enough. And in terms of personal sacrifice, there are people in this Park this summer who not only, of course, gave up every day off for the whole summer but they missed significant events such as weddings, births of their babies, funerals, you know, even as close as their parents funerals, planned conceptions if you will, I mean pretty significant events in their lives. And, so it was, people did compare it to a war zone, you know, now we did not have the tragedy and the sickness that comes with being in a war, true war. But, we had all the accoutrements of a war. I mean, there must have been fifty, sixty helicopters, you know, you constantly heard the sound of helicopters

landing and taking off and the military transport vehicles that came into help and of course at the end there was actually military here. So, it took on a very unreal feeling and I think that the magnitude of this event truly was an epic event that happens once a century or once every couple of hundred years. And it's so out of the realm of normal human experience that one, it's difficult to describe, it's difficult to explain even when you're going though it what's happening. And if you look back at it you can maybe can put it a little bit better in perspective. But, it was really an extraordinary event. Those who lived and worked here this summer and the firefighters, I think, knew that policies had nothing to do with what was happening in Yellowstone or this area. It was pure and simple the strongest forces of nature at work. On days like August 20th when the wind was howling at seventy miles an hour and the fires where jumping every fire line, jumping ahead of themselves a mile, you had a sense of how very small you are as a human being on this planet. I mean, there was absolutely nothing that was going to stop these fires and you just sat back and hoped that you could save people and save as many structures as possible. And I . . . .

[TAPE INTERRUPTED]

JA: Yeah, well we talked about people's feelings.

DP: I was talking with Jack Stark maybe a month ago and of course, he's probably been with the Park Service longer than you, I would imagine.

JA: Oh, absolutely.

DP: But, I asked him if there was any event that had focused so much national and then local attention, not necessarily in this locality, but local attention on the National Park Service in public land managing agencies as a whole. And he mentioned the Statue of Liberty might have been comparable in magnitude, but of course, it's not a crisis situation. Comment on your experiences as a public affairs person in the Park Service and the largest thing next to this and if it compared at all.

JA: Before I do the personal experiences, at the agency level at our headquarters in Washington and around the service people are saying that this was the largest event in the history of Park Service. Certainly the largest media event unprecedented in terms of crisis. Now there, as I say, we're well equipped for emergencies, you know, avalanches, and other kinds of things that, you know, you have to get people out who are in trouble, you know, rock climbers who fall down in Yosemite. And, you know, you go and try and save them, I mean, I'm not trying to make that sound trivial or anything, but we're well equipped for those things. But, the Park Service is not necessarily in the so called fire business as for instance the Forest Service is. I mean, the Forest Service has a whole part of their agency dedicated to fire and fire management and fire suppression. That is a big part of what the Forest Service does each year. Where as the National Park Service, while we have a cadre of people that are very much involved in fire and fire management, that is not what the National Park Service tends to, is not dominated by. So we were not as well equipped to deal with the crisis of this magnitude involving wild fire with all the systems set up such qualified Park Service fire information officers just as an example, as the Forest Service was. Now, for me personally, as I've written my Christmas cards this year, I've said, you know, it was the event of a lifetime or it was the most miserable event of a career lifetime, you know, I mean, I certainly never want to go through anything like this again. And I have in my twelve years of Park Service work, I have worked some of our biggest special

events that we run. Special events are not crisis, but you have similar gear ups for big special events. Whether you're going to be dealing with ten thousand or a hundred thousand or five hundred thousand people and you're running everything from staging to crowd control, to law enforcement, to medical. You know, where I've really had a hand into a lot of those. And nothing compares to this. In the summer of '84, I was assigned to the Park Service operations at the '84 olympics. And I set up the information centers in the three olympic villages that we had there and helped with our overall operations this summer in Los Angeles. And that was a major event, I mean, that was a world event dealing with hundreds of thousands of people ultimately. And very long hours, but you geared up and you knew there was an end point. You know, you knew that you had to work those twenty hour days and then you could see light at the end of the tunnel and it was a very rewarding experience because once we got set up, you had day to day contact with the athletes or the media or whoever, you know, and obviously the olympics is the spirit of brotherhood and peace so that that's a whole different series. But, I guess, posing your question, I feel that I've had a pretty good cadre and variety of experiences in the National Park Service, particularly with major special events in Washington D.C. and around the service and also, major media events. And, I've just never seen anything like what we saw here this summer. And I operated my functions here at the public information offices and actually at the bigger level of all of our information functions, based upon how I've always done in operations with media and information. And that is to be completely accessible, to be providing access for the media to get to the critical points and in this case it was the critical points in each fire. To be prompt as possible or as quick as possible with our responses because the media operates with very tight deadlines. To be accurate when we didn't know the information, simply to say we can not get that information. So, we tried very, very hard, I tried very hard to have the same standards of operations that I would have in more normal times and in big special events. And I think, for the most part, it worked well, but you know, again dealing with the thousands of people, the variety of information people that were here at a given time, it was a big, big challenge. And if I were to do the whole thing over again, I would wish that the National Park Service would have already had a trained group of crisis information officers, not necessarily just fire, but people that we could have tapped around the Service who were trained, properly trained, to deal with information in crisis, with public information in crisis but also had the agency knowledge. And I think, that as a result of this summer, we are going to develope such a core of people at our agency expanding beyond just the fire information officer role because it's unlikely that will ever go through anything like this again. But that certainly there may be, unfortunately, an avalanche or hurricane or a tornado, you know, or a earthquake, volcano, whatever, that we have to respond to. And of course, in Hawaii, and in Hawaii's National Park, volcanic eruptions are a regular part of their world and the media descends on Hawaii Volcanoes. So, we're looking at developing a core of people that can deal with crisis communications for the National Park Service.

DP: Okay, this is more in the line of just me hunting up stuff.

JA: That's fine.

DP: Thank you for the interview.

Interviewee: Doug Bird, Director, Fire and Aviation Management, Intermountain Region, U.S. Forest Service, Ogden, Utah.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 9 December 1988

DP: I'm in the Regional Foresters Office, with Doug Bird who has kindly consented to give an oral history. The date is December 10th and it's approximately 10 A.M. in the morning.

DB: I think it's the 9th . . .

DP: Is it the 9th?

DB: . . . other than that you're pretty good.

DP: Well, it's the 9th then. Good I've got an extra day. I like it when that happens. First off, I guess, maybe you could tell me in a general sense what the role of the fire and aviation staff is in the progress of a normal year?

[TAPE INTERRUPTED]

DP: One of the main things I need from you, I think, today is some insights into the administrative set up, especially, how, when there are so many agencies involved. Maybe you can talk about what you know of the development of the Incident Command System (ICS) and how this all fits together with this years fire.

DB: The Incident Command System itself is a way of organizing to handle emergencies. It's a system of putting together people and resources to cope with emergencies, whatever those emergencies might be, whether they're floods or fires or whatever. It's a basic system that developed or started in Southern California back in the late 60s, early 70s, with a research project called Firescope, which was a result of some major fires in Southern California in the late 60s. Part of the problem that had come out of those fires was oriented around, "Hey we're getting so many over lapping responsibilities of governmental agencies, local, municipality, county, state, federal and it's hard some times when an emergency of one sort or another, say an earthquake, covers multi-jurisdictional areas." It's hard for everybody to get together and sort out and decide who does what to whom and how it works. The Incident Command System was developed because of that concern. ICS provides a way for many agencies, many organizations, to work together to handle an emergency. And of course, fire was the prime mover. That's the genesis of the Incident Command System. Those ways of doing things to handle emergencies got refined, and refined, and refined and organizational charts got built and responsibilities and rules assigned and written and training done and all this sort of thing. All of the federal agencies that are involved in fir protection accepted one by one the Incident Command System as a way of

coping with wildland fires. And the Forest Service was a prime mover in that, not the only mover, but a prime mover in developing that system. We've even been able to use that system for floods along the Wasatch Front. We even used that system to handle other problems such as major aircraft accidents where you've got lots of fatalities and traffic jams and all to work in and around. A way of putting people together to work together. ICS has been the accepted system since the early 80s for all the federal agencies. There's levels in that organization that as incidents become more complex and larger, there's ways to organize and manage those things with higher and higher levels of expertise and higher and higher levels of management and authorities that reside in them. That came about in our Greater Yellowstone Area (GYA) fires this year. As things got bigger and bigger and more complex, there were systems that allowed us to employ higher levels of management and higher levels of expertise in coping with the situation.

P: Explain to me the administrative role that BIFC has, say in relation to your operation or with the Park's operation and how the Incident Command System coordinates that.

B: The Boise Interagency Fire Center is a national fire support center where all of the federal agencies are housed together to provide support to wildfire suppression activities. It's an organization that has nothing to do with, really, Incident Command System. Incident Command System is an organizational concept and philosophy of managing problems.

JP: Okay.

DB: BIFC is a small coordinating group of people that work together. Park Service people, Forest Service people, Bureau of Land Management people, State Forestry people, Bureau of Indian Affairs: people involved with fire suppression on federal and state lands, throughout the United States, common housed where they can talk to each other and where they can share and dispatch for wildfire suppression. The organizations can help to share resources between and among themselves. That's really what there role is. Within the Forest Service, BIFC is an arm of our chiefs office that deals with coordination of supplies, and resources. BIFC facilitates movement of people and things from one area of the country to another area of the country. It's a support facility, coordination facility. They have national responsibilities in staffing for fire suppression. The Regions within the Forest Service, provide BIFC with information and request assistance from them. We share with them situations, what's going on and we request from them help. We need people, we need aircraft, we need this resource. And BIFC then finds other places within the country to furnish that resource. If Montana has got a problem and they need more sleeping bags, they will request some from the Boise Interagency Fire Center. Boise Interagency Fire Center then can go anywhere in the United States and tap into a warehouse or a support facility, even if its the General Service Administration (GSA). They can find things, and deliver them to wherever the situation is; to wherever the problem exists. That's their role. Their role is support, service and coordination. They can, at times, set nation priorities. They don't set local or regional priorities, they set national priorities. When the Bureau of Land Management has a fire situation of such and such a magnitude in Alaska and they're requesting support out of the Boise Interagency Fire Center at the same time, as an example, the Forest Service has a fire problems in Southern New Mexico and they are requesting help, BIFC, the Boise Interagency Fire Center can say, "This one is a higher priority than that

one," these needs are greater because of whatever the resources involved, the threats, the loss of property, wherever it is, and can set national priorities. Our relationship as a region is just that. We provide to the Boise Interagency Fire Center our assessment of our situations and request assistance, aid, support and they in turn decide where we fit in the scheme of things nationally. Within the region, within this region, the intermountain area, we perform that same sort of function for our sixteen forests. Our regional office here in Ogden will set priorities based upon the needs of the Caribou has versus the needs of the Wasatch-Cache. We will, within our support capabilities, set priorities and decide this one has a higher priority than that one. That may or may not be accepted when it gets into Boise, you know, our first priority may be number three nationally, or number six nationally.

DP: So, who finally has control of the resources, is it only the ones, region or a some agency feels that are in surplus at the moment, that BIFC can requisition or does . . . ?

DB: They really can't, they can command movement of scarce resources. If we've only got thirty-two air tankers that provide retardant for fires, throughout the whole United States and we're utilizing one or two of those on a back country fire in the Salmon River, and there is a need for an immediate air tanker resources in Southern California to protect houses, then they can require Region 4 to release those tankers. They don't have to do that a lot, but they can in critical times do that sort of thing. In order to do that it takes quite a chain of command to make those sorts of things happen, but BIFC can do that and occasionally does.

DP: But generally there's not much, is there much territoriality?

DB: Not really, not really, because in total when you're working with all of the fifty states, and all of the resources you can often find the resource someplace without having to take it away from somebody that's already using it. But, you do have to do it, but it's not a real common occurrence. It's only in the worst of situations. That did happen this year, this past year, specifically in the Greater Yellowstone. We did run out of scare resources. And priorities were set by the Boise Interagency Fire Center and by the various regions involved. Montana set some priorities, Missoula did, Ogden did; that at times limited numbers of helicopters, for instance, that were available one place or another. If a forest in Nevada was requesting through us additional helicopters and we requested them to Boise cause we didn't have any, they may have said, "No, we're not supplying them." Or BIFC may have said, "We'll require a helicopter to come down from Alaska even though they are being used up there, because of your priority situation." BIFC could do that and did do so this past year. That may cause some organizational fussing, because there's sometimes questions as to the priority that an individual incident has. But it can be and is set as needs be nationally at BIFC or regionally within the various regional offices.

DP: Maybe comment on this fire season here in the region and then comment more on how that relates nationally, particularly to Yellowstone as the demand on resources.

DB: Yellowstone area, most of the time, this past year was the top regional priority. That's where the concern was, that's where the interest was, that's where the values that were being threatened were highest. Almost all the time the Yellowstone area fire commanded the highest priority within the region. There may have been a day or two here and there where a situation, a newly emerging situation developed that

required a higher priority. Lets take for instance a fire that occurred east of Salt Lake, the Affect Park fire. When that first got started, it had the potential to get into some homes. It was close to Salt Lake City, all of the factors that go along with that proximity. And, for a day or two, it was probably the number one priority fire within our region. And, at that point in time, in competing for scarce resources, if that fire needed something and the Yellowstone Park or the North Fork fire, or the Hunter fire, also needed that same item and only one of them, it would have probably have gone to the Affect Park fire. We would have made that decision. If the individual fire in the Yellowstone Park area was getting resources through Missoula, and being supported through Missoula, the regional office in Missoula may have put a different priority. Region 1 may have said that's a number one priority and gone to BIFC with requests for helicopters, let's say for instance, for the Clover-Mist fire and Region 4 may have at the same time gone to BIFC with a request for helicopters for the Affect Park fire. BIFC would have then had to set the priorities between these two regional requests and they may have called it one way or the other. It would depend on how BIFC interprets the need at that point in time. What were the resources being threatened? Most the time the fires that we were supporting, in the GYA, and we were supporting the North Fork fire, the Mink fire, the Huck fire (all of the fires that were in Idaho and Wyoming south of Yellowstone Park and Grand Teton Park), commanded the highest priority within the region. That's general, and anyone day it could have been different.

So, it was a tough time for us this last year. It was a complicated time. We have never within this region established an Area Command situation that coped with as many organizational entities as we did in the GYA this time. We set up the Area Command activity to manage the fires in the Greater Yellowstone Area to coordinate the management of the fires in the Greater Yellowstone Area. And when we set that up in West Yellowstone, when ever we did it, July . . .

DP Twenty-third.

)B: . . . something like that. We had never before in this region, and I don't believe any other region or any other area of the country had ever set up an Area Command of that magnitude. An Area Command essence, working for three regional foresters, one regional Park Service director, and six forest supervisors and two park superintendents. That was the most complicated Area Command that has ever been set up that I'm aware of. We've set up in California, in Idaho, in Nevada, and in Oregon, where we've handled three or four major fires. But those Area Commands were always working for one particular forest supervisor or at the most a couple of forest supervisors or a forest supervisor and a state forester. We've never had anything of the magnitude that we had this year in terms of need for coordination. I'm sure we will be able to do better next time because of what we've learned. I also don't fault too much what happened, based upon the fact that we've never done it to that magnitude before it worked reasonably well. Any time you get ten thousand people and multiple resources involved in a concentrated area it is complex. Yellowstone Park area is a concentrated area if you think about it in terms of the number of problems to be handled. And I think they did reasonably well with it. And I believe that the regions, ours and comparable organizations in Missoula and Denver, probably did not support that Area Command in the way that they needed all the times, but a pretty fair job was done. There were some conflicting responsibilities at times. The area commanders had

to work for multiple line officers, both park superintendents, and forest supervisors. And, at the same time, direct individual fires that were on those individual units. There's a tug and a pull that at times did conflict. Resources needed by one incident, were also needed by another incident that had a different line officer and different agencies working on it at the same time. And yet that Area Command is working for both of them. That tug and that pull is some times difficult to sort out.

DP: Was Area Command often caught in the middle.

DB: I think so. And then too, Area Command got to be quite large itself. It got to be where is had to subsist itself at the same time it was supposed to help support and coordinate between all of the major fires. It got large itself. It took on task of actual action. Greater Yellowstone Area Command took on the mobilization and demobilization for most of the fires to a certain extent. It took on tasks of aerial operations, management, and control for several incidents. And, it grew, to probably over two hundred persons, just involved in the Area Command. As a coordinating group, that's difficult. They had to manage themselves and coordinate and provide leadership. That complicated their job and made it where they had two different responsibilities. We shouldn't have allowed that to happen. Myself and my counterparts in Region 1, Region 2, and within the Park Service in Denver, should have not allowed them to take on those action roles. That's a personal opinion, that may have nothing to do with the truth or with reality.

DP: So, these action roles would include the, not just the coordination of the aviation operations, but the actual . . .

DB: Dispatching.

DP: . . . dispatching?

DB: You know, missions, individual missions, individual tasks.

DP: And that's the difference is that you think . . . ?

DB: That's the difference. That I don't think its really appropriate for Area Command. Area Command is to support and coordinate and at times set priorities between several fires. But not to perform missions for those fires. Not to actually go out there and flail on that fire. Each fire had a team, an incident management team, to do that flailing and beating on that fire. That Incident Command teams were the ones that were the tasked with putting that fire out. Area Command was tasked, should have been tasked, in my opinion, with coordinating, supporting and setting priorities between fires. Not dispatching people and things to fires. Anyway, that's an organizational thing. We're probably not all that comfortable with yet, because we've never done it before, I guess. I think we did, we asked that Greater Yellowstone Area Command to do things we've never asked Area Commands to do before.

[TAPE INTERRUPTED]

DB: As decisions are made it is necessary to transmit those decisions on down to the working in each organization and every level. Information car get garbled and doesn't always flow clean. Some times its added to or subtracted from. So, it's important to realize that Area Command, or a regional forester in Ogden, or a forest supervisor could make a decision and it may not necessarily always happen. Things could get balled up and people don't hear, or the right people didn't hear or didn't understand, or heard something different, or circumstances change. All those things happened and whenever you have that large of a problem and that large of an organization, those things happen, they really do. And something else is going on; a cultural thing within the Forest Service. This cultural

thing is oriented around a changing philosophy of the way you manage. The philosophy being you really need to manage through consent and not manage through orders. The "bull of the woods" type maybe was very appropriate for the 1920s, but for the 1980s it's more involvement and consent. People, organizations, and our society is changing and we're still coping with that. I don't care whether that's A.T. & T. or the Forest Service. Universities are the same way. The president of the university could, thirty years ago, decide and do. Now, the president of the university consults and advises and gains consensus and gets agreement to and all those other sorts of things. Its a different and I think its a better way of doing things. You get better decisions. But it's not fast and it's not as clean. And there is more of a chance for garbledness to develop. But that's going on everywhere in the world. It's not just in putting out fires.

DP: So, Area Command, is it, it has been used, Area Commands have been used in the context of the Incident Command System?

)B: Yes, they have. But to a much smaller scale than this year. This year is the biggest we've ever done.

DP: What are some instances of this?

)B: Northern California in fire suppression in '87. On the Klamath National Forest, set up an Area Command. Southern Oregon last year set up an Area Command. Area Command has not been set up to my knowledge on anything other than wildland fire suppression. Incident Command Systems and incident management teams have been set up on floods, and other kinds of natural disasters such as earthquakes. I'm unaware of an Area Command being established other than for wildland fire suppression.

)P: Okay, that pieces things a lot, together a lot better for me. The actual Area Command taking the task of actual air operations, was only for, wasn't for the total picture, is that correct, like the southern, a lot of the air operations based out of Jackson Airport were . . . ?

)B: They were run out of Jackson Airport, and they were not dispatched by Area Command. There were priorities at times set by Area Command for conflicting resources. But they were not dispatched, they were not acted upon, out of the Jackson area. Greater Yellowstone Area Command acted on aviation resources in West Yellowstone Airport.

DP: Who did the dispatching, who did the acting at Jackson Airport?

)B: First it was the individual incident management teams; the Class I management teams. As the situation got a little bit larger and more resources were needed priorities became a problem. More and more resource needs. And the number of resources weren't enough to go around to everybody. An aircraft and aviation dispatch and coordination center was set up at Jackson that was working for several teams. And they were dispatching (I guess you would call it) as an aviation task for the Hunter fire and the Mink fire and the Huck fire and the Fayette fire. As needs came in, a helicopter, or observation aircraft, they would send it to them or dispatch it to them,. But that was controlled, in essence, by a group that was tasked that by the incident commanders from the various fires. That went up and down, it ebbed and flowed, and the organization it got to be a half a dozen people. Maybe it got down to two people or maybe it got to ten people. When the military moved in, then a military liaison was established. But, in essence, they were working for the fire teams handling those individual incidents collectively.

DP: Where did your staff run its operation out of? I know that, and I'm not exactly sure the nature of RICO, I would understand that the Forest

Service is the major faction now, but it's a interagency coordinating thing for Region I. Where did, they found that there operation was so big that they moved, or maybe it's always stationed up there at the air depot?

DB: Its always stationed in Missoula out at the airport.

DP: Where do you run operation now?

DB: We run ours where ever we need to. In other words, if the situation is Nevada we would probably set up a coordination center of one sort or another in the Reno country or wherever we needed to do that. Ogden is not necessarily the best place for us to always do that. It depends on the situation. We did not formally ever set up an equivalent RICO situation in this, in our region, in Region 4 this year, similar to what Region 1 in Missoula did. We did not do that because we didn't have the multi agencies involved in the suppression effort. The only suppression effort that we had was Forest Service and a little bit of Grand Teton National Park.

DP: Is that region wide this year?

DB: Yeah, that's our whole region this year.

DP: That's the whole region.

DP: Our whole region this year. All of our fires in the Salmon River country were strictly 100 percent Forest Service fires. No interagency, no multi-agency need. Our fires in Nevada never developed beyond their local coordination needs. They were handled locally out of Carson City with involvement by the local Forest Service and the local BLM and the local State of Nevada. Never needed to escalate. They weren't of that significance. The fires on the Caribou out of Pocatello were all Forest Service fires or all BLM fires. We never had a need to set up an interagency coordinating group like Missoula did. They had the BIA fires; they had Glacier Park fires; they had State of Montana fires; they had all of those. They needed a state wide coordinating center and that's their RICO. We didn't do that. We might also have a tendency within this region not to do that as often as others. Maybe it's a personal philosophy, or maybe it's a regional philosophy, that our individual line officers, district rangers, and forest supervisors are responsible and accountable for their actions, even in fire suppression. And to the extent we could, we ought to leave those people run their show. That is a concept and management philosophy again. We only set up a region controlling group when it's necessary. We found it not necessary this year because didn't have the multi agencies involved. The things that were going on within Grand Teton National Park were very well handled and coordinated locally. They did that very well.

DP: With Brian Stout.

DB: With Brian Stout and Jack Stark, they did that very well. There was no need for Ogden and my people to get involved with regional director out of Denver. Coordination was being done very adequately and very well, we thought. There was some fussing between Grand Teton National Park, Bridger-Teton National Forest and some of the other GYA units. That's different. That was Area Command's responsibility to sort that out.

DP: You said that some times because there is so many, you know, you have so many forest supervisors, superintendents, regional foresters, regional directors, etc. And a lot of time Area Command was sort of caught in the middle of push and pull. What generally was the nature of that? Was the coordination between the two major entities this year would definitely have to be the Forest Service and the Park Service?

DB: Sure.

DP: Do you think the cooperation pretty good this year?

B: I think the cooperation was excellent. I believe what happened is that in carrying out individual directions at times area commanders felt that Yellowstone National Park may have said one thing. But when it came to executing those marching orders, lower echelons within Yellowstone National Park didn't always agree, or understand the need for certain suppression activities that needed to take place and that complicated the area commanders' life. I believe that Area Command had all of the formal support from the Park Service and the Forest Service. But informally they may have at times lacked that support.

DP: Now would this support be in a resource base support?

)B: No. No.

)P: Or freedom to do . . . ?

JB: More in the freedom to act, more in a clear and concise understanding of role and responsibility. No, not in terms of resources, people, overhead, and that kind of stuff. I think they were able to get that as well as anybody could. You always have problems and shortages of critical items. But as well as anybody, Area Command got that support. I don't think anybody ever really said, "Well, shoot, it's Park Service so the Forest Service doesn't have to kick anything loose," you know, from Arizona, or from the case from Utah, or Nevada, or Idaho. I don't think that ever occurred. Some people may feel that way, I don't think that was ever the case.

_P: You mentioned a cultural change going on as far as management styles. Within the Forest Service, being probably the premiere wildland fires suppression agency, and also the Park Service. There's been a change within the last couple of decades in maybe priorities, would that be correct to say?

)B: Yes.

)P: Now, maybe, you could comment on those changes and also if there's, the cultural effect of that, within the agency, because of people, you know, this transition period.

)B: Yeah. That's difficult. It takes a lot of time, a lot of work for organizations to really to get intent, communicated; to get understanding. But, in the last eight to ten years, the Forest Service has been trying very diligently to decide when fire is appropriate for the environmental scheme of things and when it isn't. And if it's appropriate, we ought to use fire to produce benefits. And, whenever we do, that is a prescribed fire. We decide that we want to enhance a certain set of values in a chunk of country. And we say one of the ways to enhance that is to apply fire to the vegetation: reduce bugs, fuel loadings, increase visuals. Fire is a management tool that resource managers can use to enhance a set of public values. And when you do, that's prescribed fire. And no harm in that, nothing wrong in that. All fire, no matter what, is not bad. Some fire increases a set of values, benefits more than it costs. Then there are fires that are not prescribed or not anticipated and planned. There are fires that occur, naturally and by man, that are inappropriate for the situation. While they may produce some benefits, that's not the reason they were put in there and their costs are probably more than those benefits. Those are wildfires and they are to be suppressed. They are to be put out. But, you ought not to put them out with a higher cost to the public, to the taxpayer, than the value of the resources you're protecting. In other words, all wildfires ought to be suppressed appropriately. You need to consider the values you're

protecting, and the cost of protecting those values. It is difficult, because lot of those values you're protecting are not market values. They do not have a price tag on them. They're social values, political values, and non-market values. How do you value a vista, you know, it's not a . . .

DP: It's not an easy thing

DB: . . . you can't put it in a market place and sell it. Your impression of that vista and my impression of that vista, depending upon where we're coming from, are different and worth more or less. So, it's not easy to come up with the value of protection. But, you need to do it. You ought not to spend more money on putting out a fire than it's worth. But you do need to also consider the non-market values. The best person, the best people to do that is the line officers that is responsible for that chunk of country, responsible for managing the resources on that chunk of country. That person, that district ranger, that forest supervisor, that park superintendent, that BLM director, district manager; has a better feel for those non-market values because they are continually interfacing with the environmental groups, with political groups, with the state offices, with tourists, with loggers. They get a feel for those values. And we have systems to help determine those values. We have computer models, and all kinds of figures, and forest plan numbers that help a line officer, a person come up with the value of the resource. That's a change. Always, up until 1977, '78, a fire was a wildfire. We used prescribed fire, but wildfire was always to be put out at any cost. The over-all policy, was suppress to fires within twenty-four hours. Anticipate getting that fire out as soon as possible, no matter the cost. We've been changing from that. Now we put the fire out appropriate to the situation. Don't spend more than what it's worth. It takes a long time to get understanding in an organization; to get that into peoples schemes of doing things. That complicated to a certain extent the Yellowstone area fires this year. Because, the values associated with a Yellowstone Park situation and the wilderness situations outside the Park were different than the values in a residential area outside the Park. Those values are continually changing. When fire is threatening or potentially threatening high value areas, your're continually changing in terms of what's appropriate, what's the appropriate way to put that fire out. How do you put it out correctly? Do you use dozers if Old Faithful is going to burn down? Do you use dozers if a wilderness area a hundred miles from the nearest road where the soil is fragile anyway, where the only damage is probably is as the smoke flows somewhere else. Do you use dozers there?

DP: Probably not.

DB: The cost of using the dozer wouldn't equate to the benefit received from it. So, those sorts of values did complicate the life of those people working on those fires in that country this last year.

DP: Do you think that that transition has been made fully or only partially amongst the minds of the people that are involved?

DB: Yes, I think it has been made. But I don't think the public understands that yet and that complicated matters. I think that the fire suppression people, do understand these relative values. But it's not yet understandable by the non-agency people. We haven't communicated that well enough to the outfitters and guides, to the skier, and to the tourist in the Park. And it's difficult, because values are always changing and not fixed. I think within the organization we've done pretty well at

that. Here's a tank truck operator that came from southern California, and was up there working on a fire. He is responsible for a portion of line to control this fire. You're supposed to control this fire at this point, that was his instructions. He's out there and he's got a truck and four for five people working for him and they know what to do, they know how to build line. They've been taught that, they know how to do that very well. So, attempting to do that can conflict with the value of a meadow to be protected. You don't drive that truck across a meadow, it's not worth it, in the mind of a person in the Park. The person that's with that tank truck, understands exactly what he's supposed to do. But, the right term and I really can't . . .

DP: Would it be relative value?

DB: . . . yeah, the park ranger that's there, says no it's not appropriate to build a line in that meadow. There's a conflict, and that needs to be sorted out on the next higher level. Sometimes it was and some times it wasn't.

DP: Then I guess the ultimate responsibility of deciding the value would be the line officer.

DB: It has to be the line officer. The park superintendent must communicate those relative values. It has to be that line officer. They're accountable for it, they're responsible for it. They're the ones that are going to take the heat by having a meadow with the line across it, or a road across it. They know best what it's worth.

DP: How bout, you say that it hasn't been effectively communicated to the public, or the public doesn't understand. And obviously, part of the public not understanding impacts on the political scene, also the media scene. How does that effect the morale and how the firefighters from the overhead down to the grunt on the line, and you yourself and you're staff, how does that conversation going on effect the people that are doing the actual work?

DB: Well, that effects them adversely. Obviously, firefighters used to be heros and now "I'm a bum". Everybody used to think I was saving the world, and now they say, I'm not doing enough, yet I'm working as hard as I can. We in the agencies have more of an obligation to understand that criticism is not always valid. You have to be able to be big enough to say, "Hey, yeah, they're criticizing me, but, they don't understand," it's right, I ought to do differently, you know. We've got to be able to sort that out. And that's agency people and agencies themselves have to be able to do that and it's difficult.

DP: Sure. I would imagine very hard. How bout the safety record up there, it seems pretty impressive to me, you want to comment on how that came about?

DB: I think it was very impressive. Overall the accidents were much lower rate than normal in a fire suppression. Agency safety was superb. The rates were significant lower than comparable situations per person or hours worked. I believe that came about because, one, you did have the highest level of professional experts. You did have your Class I incident management teams involved. And they are better than anyone else. Those groups of thirty to forty persons know how to work together, understand organizational things and certainly are capable of sorting out safety problems and safety concerns. The Area Command people themselves were at the highest level of expertise, and did understand hazards and threats. And were able to communicate that through their organizations. You had the best people involved possible. And they were always aware of the

safety considerations and the safety situations. And I think that came through. I also, believe that the individual line officers communicated their safety concerns. No matter what, we don't want to hurt people. They were willing to take the flak that might come from extra acres being burned at the expense of hurting somebody. I think they communicated that very effectively. It was a good safety show, one of the best.

[TAPE INTERRUPTED]

DB: I believe that overall the people involved in the suppression effort this year did a good job. I do believe we had problems with vocabulary and terms, especially in July and the first part of August. That I think, that organizationally between the Forest Service and the Park Service and at various levels within it. We had difficulty in communicating to ourselves and certainly to the public at large, what we meant by words we used. Such as "prescribed fire", by "wildfire", or by "appropriate suppression", and by "light hand on the land". I think those phrases and those words meant different things to different people at different times and that complicated our life. I do not believe that the agencies, in total, at the regional levels provided the firm direction the firm control that Area Command felt they needed. I think we failed to a certain extent in providing support to the Area Command group. We also allowed it to flounder at times when we could have stepped in and assisted and supported. But, overall, I think a good job was done. And we probably spent too much money of the taxpayer, but, relatively not so. In other words, I think, the public did say, "Whatever you need to spend you ought to." I think the agencies had all the support in the world from the nation to do what was necessary. And there was no, there's not going to be any flak received this winter or next spring about the inordinate costs of the fire suppression. I don't believe that's a factor. I believe the values of the Yellowstone Park area in the publics eye are greater than whatever the costs was.

DP: Do you think there's a cause and effect relationship there, is the reaction of the public part of the reason why so much money was spent?

DB: Certainly, certainly! But, you see, that's a way to also determine non-market values.

DP: Sure.

DB: And expression of public concern is an expression of value and you can make a determination well that's worth a hundred thousand. Your judgment is as good as anybody else and until somebody changes it, well, it's not inappropriate figure. I think so. That's an expression of public values.

DP: Besides expression of public values which is an indicator where the agency should put their emphasis, was there any, what you would consider untoward pressure from certain specific groups, politicians, organizations, etc, etc.

DB: I don't think so. My opinion is that we had a lot of interest and yes, we did spend a lot of time dealing with political concerns. Some of us may have felt at times that interest on the part of xyz senator, or xyz congressperson or other political interest, political type person complicated their life. I feel that that is life in the United States and that's appropriate. And we need to cope with that and deal with it in the best way you can. Certainly you feel at times that political pressure, if you want to call it that. But, I don't think it's inappropriate. I think that's the way life is, and that's okay.

DP: But, most of that criticism was always of the general nature, or did it ever get specific you should, as far as actual the fire suppression effort, I mean as far as the nuts and bolts of the thing?

DB: I didn't feel any of that specificity. I believe that individual forest supervisors did feel some of that at times.

P: On a local basis?

DB: On a local basis, yes. I did not feel that, I really didn't. I think, overall, we had good support from the political entities. I don't think that you'll find that the Yellowstone Park superintendent always felt that way.

DP: Sure.

B: He felt it more personally.

P: And the Park seemed to be more of a symbol.

DB: That's a focal point, no matter what you could say, no mater what the circumstances are, Yellowstone National Park is the focal point. It's not the same as the Bridger-Teton Forest or the Teton Wilderness. Yellowstone Park has a different connotation and they are going to be the focal point in this situation.

P: Just as an after thought, could you just briefly tell me the difference between a Class I and a Class II team? Class I is more experience I think.

B: More experienced, more qualified, have had higher levels of training and are equipped both in training and experience to handle a fire situation anywhere in the United States. They have an organization that's worked together, know each other and well trained with the highest level of experience and qualifications. Class II is a step down from that. They are more local in capabilities. They understand ICS and all that sort of thing. They know how to organize themselves but they are more local in their application, they understand their local situation in depth, but not necessarily would a Class II team understand all of the ramifications if they were from Arizona and assigned to a fire situation on the Olympic Peninsula. They might, but not necessarily. They weren't specifically trained for that sort of thing. But your Class I teams are interagency in scope. They're always composed of best people in the BLM, or the BIA, or the Park Service, or wherever.

P: Well, thanks for being so generous with your time.

Interviewee: John Burns, Forest Supervisor, Targhee National Forest, St. Anthony, Idaho.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 21 December 1988

DP: Okay. Why don't you say something.
JB: One, two, three, four, four, three, two, one.
DP: Okay, I'll put a tag on the tape here. We're in the office of John Burns on the, in St. Anthony in the Targhee National Forest headquarters here. Generally let me tell you a few of the aspects that Pat Sheehan has put in the contract that he wants me to cover. The background of natural conditions and responses of agencies to developments leading up to the fires. Agency policies and decisions guiding fire control and management strategy as events progressed. Public reaction to fire management strategy and the influence that reaction had on subsequent decisions. Then a summary of the results of the fire season. Maybe you can give me, I know that you have experts on your staff that can give me more detail but just a general overview of the natural conditions that led up to the conditions this summer on the Targhee National Forest.
JB: Well, this summer, of course, was really the second dry season that we've had. Actually, the summer and winter were the second year of it. And the year before, previous to this summer it had been quite dry toward the end of the summer. We noticed on some of our late season fires that were very difficult ones to control. They were controlled, but they got bigger than they normally do for us. And the people had more difficulty doing it. So that previous summer, at the end, was the first year our people said, "Gee, you know, this shows how lodgepole pine really can burn." I'm referring to the decadent lodgepole type where we have a lot of the insect killed timber in it. So, we have a real heavy fuel loading in a lot of our country. Lots of dead and fallen trees. Typically it doesn't burn very well because it holds so much moisture. But any event, we saw that very dry condition developing last year. Then we had the dry winter, lower than normal, and a very early spring here. Although we did have some early summer late spring rainfall it wasn't really enough to make any difference in the heavy fuel moisture the larger dead wood we call the thousand hour fuels. So, actually quite early this summer we knew we were going to have quite a serious year. And our prescribed burning was cut off pretty early. Most of our prescribed fire here is in brush types, where we are trying to improve wildlife habitat or cattle range or sheep range. It's not burning in a timber type, but burning in a brush type. But in any event, we had to close that off early. Also, we didn't get a great amount of our logging debris burned. We pile it with

dozers and then burn those piles. And we had great difficulty late spring, early summer in doing that burning. Those fires kept wanting to escape. We'd think we'd have a pile out and there'd be smoldering down on the ground and would break out, in fact, which was very unusual thing for us. So, again, the indication was very, very severe conditions developing. And then as the summer began to develop Yellowstone had several prescribed fires that we could see the smoke from. The Falls fire was one such and was very close to our boundary. And, we were worried about it and we didn't want the Park thinking we'd be in a position to accept a prescribed fire. By accept I mean say, "Okay it will meet our objectives, let it cross the line."

As a prescribed fire?

Yes, as a prescribed fire. So, we notified in writing both Yellowstone Park and Grand Teton Parks that we would not be able this year to handle any prescribed fires. Our intent was that they would know to plan for control action out before they got to the line. And at the same time, we also notified all our rangers to not even think about anything other than an immediate suppression strategy on fires, because the potential was so great for them to get away. Now part of the background--this forest typically doesn't have much of a fire problem. We get a fair number of fire starts, maybe thirty a year, but, normally we get enough rain through the summer that conditions aren't that severe. Most of the time our severe fire weather occurs late in the year and we would tend to think of late August and September as our bad fire months. And typically we've seen what they now call the wind event in Yellowstone. That's really not a rare thing in this country. We've seem some of those heavy winds out of the south and sudden reversal when a front passes through. And in 1981 we had some fires starting on BLM land that made very long runs over in the Dubois country. Started clear out in the desert, went all the way up onto the forest and one of them almost got to the continental divide. I believe it was the Indian Creek or Cottonwood fire. But, they were being shoved by that heavy short duration type of wind that was the same as what the August 20 big wind event up in Yellowstone. So, we knew we could get those kinds of weather conditions. We also remembered, even though few of us were here when it actually happened, but the Gallagher Peak fire. That fire was a management fire, lightning caused, that for several weeks had burned up on Gallagher Peak and had done nothing. Suddenly one of those heavy wind conditions hit and it took off down the mountain and, I think, burned a couple of hundred thousand acres. It covered a lot of country, it made a lot of distance. But, again, I'm just pointing out that you can get that abrupt heavy wind condition here, almost literally out of the blue, and then you can get a sudden reversal that makes for a wild situation. So anyway, the long and the short of it is early this summer we felt pretty certain that it would be the worst fire year that we'd ever seen. And so, we did take the steps to let our neighbors know our circumstances and also tried to make sure our rangers didn't think, "Well, this one up here will be okay to handle as a prescribed fire." The chances of keeping one in confinement or containment--as opposed to control--didn't look to good to us then. And then as it turns out, that, you know, the way things evolved through the summer, just got worse.

Tell me about the recent history, what I mean that is, you know, last fifty years or so of the beetles on the forest. I know the forest has had beetles.

JB: Well, the Bark Beetle epidemic really got going. I would say through the 1960s. And in that era the Forest Service suppressed, or attempted to suppress the beetle activity through either cutting and burning infected trees that had the beetle still in them under the bark, or through spraying. It's a hand pump and a nozzle and you just literally spray the standing tree. The chemical used was a fumigant and kills the insects while they're still inside the tree. The Forest Service had major programs in that period on the pine beetle, in this area and elsewhere, trying to cope with it. Then the Forest Service concluded that was just no longer a practical approach, that the beetles were eventually going to win anyway. They ended the suppression effort and instead switched the strategy over to one of dealing with vegetation itself in terms of getting it back into a younger age class that the beetles don't hit. The bugs like a larger tree in the eighty year old range, because there's enough bark thickness there to provide protection for the over wintering insects, also, the tree has less vigor then and it not nearly as able to pitch them out, wash them out by the sap. So, as the population of beetles continued to build we then got huge areas, literally hundreds of thousands of acres of lodgepole, where sixty to eighty percent of the trees were killed. So, we had a condition out there of the majority of the trees in the forest then being dead. And then as they began to fall over and jackstraw, why you get a tremendous fuel situation. The "resistance to control" goes up tremendously when you get the large material on the ground and you have the standing snags. When they burn they're very dangerous and of course, if they fall they spread fire everywhere. And they also spread fire from the sparks and brands coming off of them. So, we saw the fire hazard for the forest going up tremendously due to the beetle activity. Our forest plan in 1981, was built around maximizing the acreage that we could salvage log and then reforest. And we do, oh, anywhere from twelve to fifteen thousand acres a year of logging and reforestation in a attempt to get as much of the forest as possible back to a younger age class, instead of the big continuous blanket of dead lodgepole. A lot people are very skeptical, when you tell them, "Well, this reduces the fire hazard," but it really illustrated its worth when the North Fork fire blew back out of the Park onto the forest. We were able to stop it twice taking an advantage of our roads, cut blocks, and regeneration units. The first time, just a few hundred acres were burned back onto the Targhee. That line held for over a week and the only reason it was lost again is they had to pull all of the firefighters off that particular stretch of line and send them to West Yellowstone for the defense of West Yellowstone. There was no one left on the line to chase any of the spots coming across, and consequently that line was lost. But it was caught once more. Taking advantage of clear cuts and the open area, it's much easier from a fire control point of view to work. In that kind of situation you have safety zones built in instead of being surrounded by ten miles of nothing but flammable dead trees. We found the young trees didn't carry the fire like the old stuff. We had several thousand acres there of, ah, trees ranging in size of anywhere to a foot tall up to fifteen feet tall. But those stands just didn't have all that dead fuel to inside them to build up that tremendous heat and cause the explosive burning. They would burn of course, but they burned in a much slower manner and more easily controlled manner. So, I think it did illustrate the benefits from a fire protection point of view of having a mosaic of forest stand conditions and ages instead of a continuous blanket of one type of fuel.

DP: Tell me about a line officers role, I guess particularly your role in determining policies and decisions in the control and management strategies of fire.

JB: My involvement in the overall control strategy was limited for the simple reason that although the North Fork fire started on the Targhee about two hundred yards inside our boundary, it quickly got across into the Park. It was controlled on our side but the wind was shoving it into the Park onto the Madison Plateau. But once it was into the Park then my role then was more peripheral. I attended the strategy meetings with the Park people and the incident commanders and so on. But, once it was off the Targhee, common sense tells you I wouldn't have as great a voice nor would it even be appropriate for me to tell them how to fight the fire over there. When it came back onto the Targhee, why then my involvement was quite a lot higher, as well as that of the local ranger and our fire staff here. That was a somewhat unique situation, because when it did come back, what we had to do was mobilize our resources here on the forest, locally, to deal with it, The personnel assigned to the North Fork Incident where committed elsewhere at that time--they were having all the problems with Old Faithful, Madison Junction, all of the other developed facilities within the Park. And that was absorbing the attention and resources available to fight the North Fork fire. We had to tackle it as an initial attack thing on our side and so that's actually what we did. Our people stopped it and handed it back to the fire organization once. When it got away again, because the resources were committed up North, we stopped it a second time.

P: Who headed that up? Was that Rodd Richardson?

B: Uh-huh.

DP: Your Island Park ranger.

B: Yeah. Our objective there was just to stop it as quickly as, you know, as we can. And to call for whatever resources that we could muster. A number of summer homes, businesses, powerlines, and so on were threatened up there. One thing we tried was agricultural irrigation systems to protect structures. I want to say, five or six miles, but we scoured the country, you know, for the big large irrigation sprinkler set up like they use in the potato fields. And set those up around the threatened summer home areas and one resort.

P: Those are the gravity ones, the big ones with the slits in them or the actual ones with . . . .

B: No, the sprinkler heads, yeah, with large pumps in the river or the stream as the case maybe. Oh, they were about eight inch main lines and then six inch laterals, so they were a good size sprinkler set ups. Move a lot of water. But that technique for protecting structures was probably about the only feasible way it could be done there because there was so much vegetation in close to a lot of those buildings. The people had never really fire proofed them. Everyone likes the trees close to the house and all of that. And, in fact, some of the California structural defense fire crews, when they first looked at 'em they said, "There's no way with our engines we can even dare put people in there if it really gets seriously threatened." So, the sprinkler set ups were the last resort. They were able to just thoroughly soak down the country around those homes. So, I believe they would have, had they actually been pressed hard by the fire would have been successful. As it was, they put out a couple of small fires that occurred from power line problems in or next to the summer homes. But that whole thing was coordinated as I say,

by Rodd Richardson, the ranger there. The one other thing that we did to keep a continuous control during that time of crisis was assign Bruce Fox as the alternate for Rodd. Bruce, the ranger at Ashton, was previously the ranger at Island Park. So, we set it up on a day and night shift situation were one of 'em would handle it one shift and one of 'em would take it the other. So we had continuously a ranger with experience on that district, guiding that effort. The fire management officers, Don Black, Wayne Bushnell were very instrumental in the on the ground strategies, tactics, whatever you want to call 'em, in dealing with it. We probably had up to a dozen dozers at couple of points in time working our section of line. They built about sixty miles of dozer fire line dealing with that eighteen thousand acres that burned out onto us. And that represents about half the dozer mileage that was built within the entire Greater Yellowstone area during the fire season. So, it was a very aggressive effort in that point. But it was a developed piece of country, it had been subject to logging activities since the early 1960s and the road network was in. We had all the mosaic and clear cuts and leave strips so you could work with dozers pretty effectively. And they were, to my way of thinking, highly successful given the extreme fire behavior. It was the leave strips of old and dead trees, really that carried the intense fire and caused the spotting. As I said, the regeneration didn't do that. It was much more fire resistant, amenable to control. Myself and the Targhee's fire staff officer John Price and his fire management assistant, Keith Birch, were up at Island Park ourselves on a daily basis. Our role was more to make sure we could get the needed resources, that we could expedite getting whatever resources the ranger needed to deal with the fire. And it was a unique situation there because, as I say, it was the North Fork fire. But, the Incident Command team had other higher priorities that they were coping with so we were filling in for part of that fire organization. It created complexities of ordering supplies and material and resources and personnel assignments, and those sorts of things. So, we, the fire staff and I, were there in the role of expediting and getting what the ranger needed. It was just part of the chewing gum and bailing wire type of fill in approach we had to take to deal with that event on the fire. After the summer homes began to get seriously threatened, and the power feed for West Yellowstone and all of that country in that corner of Montana, the priority began to shift to Island Park. The Incident Command team for North Fork began to realize that the fire effect on our side wasn't just burning up trees but threatening structures and threatening power supply for West. The consequences where much bigger than just the local thing. Then the resources began to flow in here from the North Fork fire. And ultimately we probably had oh toward the end there, just before we got the snow, perhaps nine hundred, a thousand army troops. The Incident Command for the North Fork had fully taken it back over again. So, we got into it twice and phased out of it twice and kind of a unique . . . .

DP: So, it was given a higher priority when they realized the importance of keeping that power supply?

JB: Uh-huh, that was a major, I mean that's a major power line. I mean, it's a high voltage, high tension line, whatever you want to call it. And that and the structures. The structures, of course, are a priority. And, we had four different structural areas being threatened simultaneously by that fire at its maximum extent.

DP: Okay, give me your sense of the public reaction to the fire management strategy and the fire in general.

JB: Well, the public reaction, I think, the public on this side, their opinion was split. I think they realized very early in the summer we had no intention of allowing any fires to burn on the Targhee Forest and I believe they realized that. It was all out suppression on every fire that we had and we ended up having sixty some odd fires. And the North Fork, of course, got away into the Park. The only other major one we had was Spring Canyon which went I believe, I want to say three thousand acres before it was controlled. So, they, locally the public, knew we were in a full suppression mode. What bothered them was once the North Fork fire crossed into the Park, and even though it was a suppression classified fire, the public could see that it wasn't being directly attacked in all localities. It was a defensive strategy for the North Fork fire, protect Old Faithful area, protect Madison Junction, etc, etc. But, there just were not the resources available, and the fire was so huge, to go up on the Madison Plateau and wade into that sea of lodgepole pine and start building fire lines around the whole thing. So, what the public, I believe saw, was us saying one thing, saying it's a "suppression fire" and them asking "Why aren't you up there putting the fire out?" Cause they could see that was not happening. And, I think, that's where a great deal of the conflict, to this day, stems from. We have a terminology problem, we call it a suppression fire and we want to put it out but we don't have the resources to totally stomp it out right now. And then the public says, well, how can you call it suppression if you're not suppressing it? And that's what, I think, is fueling the conflict a bit even to this day. Over whether or not the fires where properly fought. Because, it was a long time that there was really no action on the west side of the North Fork fire. The side toward West Yellowstone, and the side toward Island Park. We were in the mode here of watching it and waiting and figured it would come back out again, and sure enough it did. Under the prevailing winds, it just kept creeping westward towards us. You know, well it was swinging on an axis is what it was doing, with its point of origin down here. But once that wind reversal hit, then it blew back out in a much more aggressive fashion and was suddenly back again. And the public reaction was why wasn't it put out while it was in the Park? The other big part of the public reaction, of course, is that we didn't take the bulldozers on the initial attack past the national park boundary. And Rodd Richardson and Joe Evans, the West District Ranger for the Park Service, just right away, within hours that first day, you know, were in communication. The Park didn't want heavy equipment crossing the line. Chain saws and hand tools were used for awhile to build line at both flanks of the fire into the Park. But, there's been a lot of criticism and Monday morning quarter-backing. Some feel if we took the dozers in we could have succeeded in stopping it. All I can say is the Park made the decision at that point in time based on their best feeling on the proper way to deal with it. Their response to the Park boundary was pretty similar to what our response would have been at a national forest wilderness boundary. You know, we don't casually commit heavy equipment to a wilderness fire situation either. Now, when we brought in the Class I overhead team, at first they were based on the Targhee side, close to the point of origin. The fire camp and the fire boss, Caplinger's team, were based on the Targhee. At the briefing for them I did make the point that they should really look at the situation with the Park and if they're

ever going to commit dozers inside the Park, now is the time to do it. Because we did state at that point that they would soon be dealing with it at Old Faithful and at Madison Junction. We saw no way, given the prevailing winds that fire would stop up on the plateau, it was going to come down the other side, although we never guessed it would go all the way to Mammoth. It went about twice as far as we guessed it would. But, nonetheless, I think, there was the feeling that fire would probably confine itself to the plateau by some folks. Some of us didn't agree with that but, you know, when you're speculating about the future, there's no way to prove whose right at that point. And so, in retrospect, I guess, those are the kind of things that colored the public reaction. One stopping the dozers at the Park boundary. And the second, not having some kind of an aggressive suppression activity along the west flank. But, I don't know any way you could have dealt with that without committing equipment, heavy equipment. I don't know if you've flown over that country, but it's big and it's flat as a plank except it's got some canyons and ravines here and there, plus a few meadows. But, by-in-large it's a sea of trees. So, if you're building fire lines and you go very far, then you'd have to build a big safety zone. In other words, doze out an area the size of a football field where people can retreat into it in case things blow up on them. And so you'd end up with a pretty heavy impact upon the land up there, so I certainly understand the rationale of the Park Service of not wanting to carve up the Madison Plateau with heavy equipment. Now, Rodd, I believe, feels confident that they could have gotten the dozers around the fire that first night. Distance wise it would have amounted to about two miles of line. The big question is then, when the burning period came on the next day, would it have spotted out and been beyond the line. Would it have been a futile effort? And in the judgement of many folks, it would have been. The judgement of other people is, "Aw, they could have caught it with a little luck, you know." So, they can debate that until the cows come home. And probably will.

DP: Are there any, either business, interest groups or individuals who showed a lot of interests in the fires, or have a lot of interest in the fires for various reasons and made contact with either you or other persons in the forest.

JB: Well, again, because we were on the periphery, and all the action was going away from us, until it finally blew back out on us, not so much. Everyone here could see the smoke columns, you know. In fact, when the North Fork took off and I was flying back from Missoula, in a Forest Service plane, and we saw a new column out there. We'd been watching the Falls fire in the Park for some days. On the plane, we were talking about, gee that one, that one looks ominous. Is it on us or is it on the Park? And, it turned out to be us. And then them, but as it developed, at one point in time, you know, you could see maybe half a dozen different columns from St. Anthony. Fortunately we didn't get much smoked in here to much because the wind cleans out the valley. West Yellowstone, you know, was smoked in for days on end. Bozeman had smoke problems and so did other places. But we didn't have that smoke problem here day after day. So people here didn't as wound up about it, they didn't get all that excited about it because they were used to seeing smoke columns in the Park in the summer time, although not as big as we were seeing this year. Not until it began threatening summer homes in Island Park and the business there, did the people really get worried and that was the tail end of August, early September. And as I say, typically that's when we

get our worst fire behavior and that was the case. The business people on this side, I think, tourist related, for most of the summer benefited because of the South entrance being shut down. So, if you were a tourist coming to Yellowstone, you got to Jackson, you found out that you couldn't go in the South entrance, so you came across Teton Pass, and through Driggs and then on up Highway 20 here, through the Island Park area into the Park via West Yellowstone. So, personally, I think, the tourist business on this side of the hill benefited from the fires. We're doing a compilation of expenditures by locality. There were some very large amounts of money pumped into the surrounding communities in support of the firefighting effort, like renting these irrigation systems, and hiring people to go install them, hiring firefighters, organized crews, purchasing supplies, equipment, vehicles. So, a significant amount of money was pumped into communities like St. Anthony, Ashton, West Yellowstone. In the case of West, whether the additional amount offset or overcame the loss there that they ultimately felt from tourists, I don't know. And I don't know from a tourist point of view how that balances for them. I suspect earlier in the year and then no doubt once West was threatened by the fire, and smoked in, then it fell off, their tourist activity. But, in the same way you had people, chambers of commerce excited in Cody, excited in West Yellowstone, you didn't have that here in this area. When you get personally impacted you tend to react to things a lot more. Most people anyway.

)P: How do you view the various aspects of interagency cooperation?

JB: Well, really, you know, it was awfully good, I think. I've worked for the Forest Service almost thirty years. And it was the most complex, elaborate, largest firefighting effort I've ever witnessed or encountered. And certainly the multi-agency aspect on this fire exceeded that of any other, at least that I'm aware off. And so, you can point to a lot of mistakes and how you would do it differently if you had it to do over, but no one had ever done anything like this before, organizationally, with an Area Command and those sorts of things of that magnitude. So, I sure couldn't fault them. I probably would have made a different set of mistakes. But, I certainly would have made 'em and so would anyone else. I think they did remarkably well given the complexities we were dealing with. And then when nationally acute shortages of people and equipment developed later in the fire season, that was coped with. Yellowstone got all the attention, but it was a serious fire season in a lot of other places and a lot of resources were being drawn by those localities too. So, I think they did very well.

)P: Talk about the role that the Greater Yellowstone Committee played in the fire suppression effort.

IB: I guess I would say the main benefit of the Coordinating Committee when the fire thing came on was that we all knew each other very well already. I mean, all of the six forest supervisors and the two park superintendents and the three regional foresters and the regional director of the Park Service and their respective staffs. Because of the on going Coordinating Committee work, everyone knows everyone personally. And, in any type of situation, that always saves you a lot of time and a lot of organizational problems. And you aren't nearly as, well you don't hold back much when you know the group you are working with as opposed to putting together suddenly a new group. So, I guess I would say, by nature that the fact that we were already accustomed to working together, although we hadn't done it on fire control in this sense other than just

single units coordinating with each other. That to me was the big benefit. The committee gave some, you know, specific guidance in terms of initiating Area Command approach and early on agreement that it would be a interagency effort in total, that we wouldn't worry about where the fire was in terms of how we set up the organizations. So I think if we hadn't had the GYCC I don't think we would have done half as well up there. And again, to me, that main benefit was knowing the other people. Also, knowing the country. All of us have been all over it cause we had our meetings in different places, and we have other activities such as coordination trips in the field. I've ridden horseback across the Madison Plateau with the national park people. Each year we have a trip with Teton Park personnel. Part of the time they're on us and part of the time we're on them. So, it's that familiarity with the country and conditions that's a big help too, not just the people.

P: An open ended question, anything that struck you as unique, interesting, or otherwise of historical value over the summer?

B: Well, the size of the fires was obviously once in a century event, at least I hope it's just once in a century. None of us want to do it again. But, that was obviously the big unique aspect of it. We all knew the potential was there and building, especially our people. They might be more tuned into the vegetation and the relationship of fire on it because they're working with it continuously as part of the timber program. What the timber program attempts to do is replicate the effects of fire in terms of regenerating the forest, just do it without the fire and the smoke and the expense and trauma. The lodgepole pine reacts the same to a clear cut as to when you burn it. So, the age of the trees, and the condition of the trees and the fuel management, fuel moisture circumstances and fire behavior, are all factors in deciding how to manage the forest. Our staff people, I'd say, are pretty knowledgeable in that area. And they're probably, in truth, more technically sophisticated in it than the park people, who do not have as much experience in direct vegetation management. I do have the sense that the Parks tend to take a more liberal view of fire than we have. And they have not had the need to get into it technically as deeply as we have. Our prescriptions are written tighter than theirs, as we usually have a specific vegetation purpose in mind. I'm not faulting them for that approach, I'm just saying, it's a slightly different emphasis that they have, which reflects national park objectives. So, we, I think, we really realize that some point in time that a big fire had to come here because we had seen all of the accumulated evidence about how these lodgepole forests were created in the first place. Perhaps the severity didn't surprise us as much as it did the Park people. You can look at that in a couple of different ways, we're more cautious, more scared, whatever the right word would be, versus them being more liberal, more willing to take a little risk on it. But, in any case, the fire event confirmed our view of the effect of the bugs, the fuel build up, and the inevitability of fire when given the right conditions. And when they all come together then you get intense fire. We just happened to be here at that point in time when all those conditions came together. It acted pretty much as most of our fire people have said it would act. Again, none of them had witnessed fire behavior in lodgepole as intense at this, but they knew it had to have occurred sometime in the past. And our folks, most of our people, would have said it probably happened in the 1870s. Somewhere back in that period, about a century ago, is when our fire people would have said was the last big

event. I read that some say it's been three for four hundred years. I personally have a tough time visualizing how we would have gotten these present lodgepole forests if the last big fire event was that long ago. They wouldn't have been that uniform, or bug free up until the 60s. So, we'd view it as a much shorter cycle, perhaps, than some others. Who knows, but none of us will be here in another 100 years to see who was right. The other danger is that you over react to this type of occurrence. And, you know, as it moves into the political arena you need to be careful you don't end up with policies that really aren't scientifically grounded. A lot of folks try to use the fires as justification for one or other type of land management approach that they may or may not favor. There's lots of questions regardless of your choice. To me one of the biggest from a resource point of view is the air pollution aspect. No one has come up with a tonnage figure yet on what got pumped into the atmosphere from the fires this summer. But it has to be fairly significant. And it was for a sustained period of time. With all the concern now about the green house effect, removal of the forest in the amazon basin, and the effect that has on the atmosphere, one has to wonder about prescribed fire. If things are getting that tight, I would ask how much longer the world can afford to say, "We'll manage our vegetation through fire." We may not be able to afford the cost of pumping the smoke into the atmosphere, the cost in terms of the effect on the atmosphere and not the dollar cost. I think that's a big question to be addressed, but I find a common reaction to be, "Ah, that's a tiny fraction." But, those same folks get concerned about tiny fractions going into the air elsewhere. If I had to bet, my guess is that within ten years we conclude that we simply can't afford to do that to the atmosphere much longer. That will move us into a tighter suppression mode and greater reliance on mechanical means to manage vegetation. Just clear cutting a patch of lodgepole and letting the branches with cones on 'em lay close to the ground, you get sufficient heat then to open the cones and disperse the seed. You really don't need the fire to do it. But, the notion of cutting the trees as opposed to burning the trees, bothers some people. They prefer the "natural", or more natural approach. Within a national park or wilderness it certainly is a desirable approach if we are able to continue to do it. The other aspect that I would relate to on policy, especially is the notion of "natural fire." That, I think, is a unrealistic notion by which, I mean, once you've suppressed some fires you're kidding yourself to think you're going to have a natural vegetative mosaic by letting some other selected ones go is unrealistic. I mean, you either got to let nature do it or not. And if you're partially intervening by choosing to suppress some and not others, I guess I would say, the sensible thing then is to determine what kind of vegetative mosaic you want to have and then ignite the fires yourself to achieve that during a period when you know you'll get the result you want. Do it when you know you can limit the fire to the size that you want. Just the randomness of nature, sending lightning down and starting some of the fires and us putting some of them out and letting some go, I think, completely negates the natural vegetation objective. And I think, another way to say it, I believe you could have a more natural looking vegetative mosaic if we chose the time and place to ignite all the fires that we want to burn. I wouldn't depend of nature to do any of 'em. But that's a hotly debated national issue among the Park as well as the Forest Service

folks. The national park natural fire policy is much the same as ours in national forest wilderness.

Interviewee: Gary E. Cargill, Regional Forester, Rocky Mountain Region, U.S. Forest Service, Denver, Colorado.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 16 December 1988

DP: So we're functioning here, let me put a tag on the tape. We're here in Gary Cargill's office in Denver. It's Friday the 16th of December and it's approximately one o'clock. Briefly let me tell you the scope of the contract, what they want me to cover and some of these things you'll be a good person to get insights on some of these points and some of them probably not. The first point, have I got you on too tight schedule?

GC: No, it's okay.

DP: The first point is to get a background of natural conditions that led up to the fires. And the responses of agencies to developments leading up to the fires. Agency policies and decisions guiding fire control and management strategy as events progressed. Public reactions to fire management strategies and the influence that these reactions had on subsequent decisions. Areas burned, damage assessment, potential benefit assessment, etc, like that.

GC: That last one is all in charts and available, you only need to get that once. You don't need to get that from everybody.

DP: Right. Yeah, no, I was just, kind of letting you know what the scope of the project.

GC: I can give you a perspective on what I think the effects are without having to talk about the specific acreage and all that stuff . . .

DP: Right.

GC: . . . cause that's all a matter of record.

DP: I'm just trying to give you a sense of what the scope is. Maybe to start off tell me a little bit about your background in the Forest Service, how many years you've been in it and then the change in fire policy in the last twenty or thirty years.

GC: Well, alright. I started with the Forest Service as a summer employee on the Sequoia National Forest in California on a crew which pruned trees and fought fire, it was a seasonal laborer job. And then came back to school at Syracuse College of Forestry it was called then, New York State College of Forestry in Syracuse University. And when I graduated from there in 1958, I went to work for the Forest Service on the Santa Fe National Forest in New Mexico. That was 1958 so I've got thirty years plus with the Forest Service. And started in my first seasonal assignment with fire suppression on a crew and have been in it and out of it ever since. I had various fire assignments as I was coming up through the outfit. Had training in fire behavior, fire command, and organization. I was assistant on the aviation and fire management staff in Region 3 in Albuquerque and went to the chief's office for the first

time in 1970 through '72. On the director's staff for aviation and fire management staff in fire training and fire safety. And then I went back out to California as a forest supervisor and back to Region 3 as a deputy regional forester. And then I went into the chief's office again, in 1979 as the director of aviation and fire management for the Forest Service. Then I was an associate deputy chief from 1981 to '86, then came to this job as regional forester for the Rocky Mountain Region in 1986 and I've been here since. So in those thirty years I've had a variety of fire related assignments and have had a hand in managing fire programs and setting fire policy for the Forest Service since about 1979 on. And that tells you something about my background.

P: Has there been a shift in fire policy in the last twenty years.

C: Oh, yeah.

P: Kind of chronicle that for my perspective.

C: In about 1938, as I recall, the Forest Service adopted what was called the 10 A.M. Policy. And that said that for any fire which escaped initial attack you were to plan to gather the resources sufficient to control the fire by 10 A.M. of each succeeding day. That's not a direct quote but it's pretty close. And the idea of each succeeding day was a recognition that you might not be able to get enough resources or have the possibility of catching that fire tomorrow or the next day. But the point was that your objective was to control that fire as soon as you could get the resources and the opportunity to do it by 10 A.M. of the soonest day. And that was generally considered an aggressive control policy on all fires. In about 1972, the Forest Service underwent an extensive fire planning effort. And there was a lot of discussion about values at risk. And there was beginning to be increasing discussion of the effects of fire on those values, recognition that there were some benefits and some damages. But, it wasn't all damages. And we began to talk about net effects of fire. And we began to get better use of computers at gaming strategies for planning fire responses. And that led to a fire plan which service wide was probably in the $300,000,000 range. This is in 1972. Finances from '72 to about '77, following that plan were pretty much on an upward track. And we began to have fire suppression modules and fire management officers on more districts. And more crews in place. Now this in part replaced the large crews that we had lost over the years. We used to rely on crews such as blister rust crews, and TSI crews, but these large pools of manpower had pretty well dried up. And so, in that period we began to replace them with financed people, dedicated to fire suppression. We noticed in a policy analysis, that is an internal review of fire effectiveness, that we had reached a point where it was difficult to demonstrate that spending another $100,000 dollars was going to diminish the net effects of fire by $100,000 dollars. We seemed to be stuck at about a 98 percent initial attack success and it didn't seem to matter how much money was budgeted, we couldn't assure ourselves that we were going to get that last 2 percent which was causing about 90 percent of the losses. Internally we became aware of that, the OMB (Office of Management and Business) became aware of that, and the Congress became aware of that. People began to wonder whether or not we were trying to achieve the unattainable through financing fire organizations.

And that notion became coupled with the growing recognition that there were some places where fire was a natural part of the ecosystem. And in the 1964 Wilderness Act had made it a matter of law that in areas classified as wilderness the natural processes were to prevail without a

permanent imprint of man. That led us to further fire planning. It led us to accepting the notion that in some areas, primarily those classified as wilderness, you might be allowed an exception to the 10 A.M. Policy wherein a regional forester, initially the chief and later the regional forester as authorities were delegated down, could decide that a particular fire would not be controlled by 10 A.M. of some succeeding day but would be allowed to burn to obtain certain objectives for wilderness purposes. That was on an exception basis for a period in the Forest Service of about five years probably, five or six years. Then 1977 efforts began under Hank Debruin, who was then director of aviation and fire management for the Forest Service, to restate the policy; to allow as a matter of policy rather than a matter of exception this notion of a natural prescribed fire. That policy was written in about a two year period and put in place in 1978. 1979 was the first season to test that policy. The Gallahgar Peak fire in Region 4 and other fires in Region 1 and Region 4 in the fire season of 1979 tested us mightily. And we found . . . .

DP: In what ways? Public reaction?

C: Well, both publicly and internally because we found that though we thought we understood the policy, we had in fact a great deal of problem with terminology. We had phrases like "management fires" and the term "let burn" crept in. We found we had difficulty explaining to ourselves what the policy was. And we had an awful time explaining it to the public because that series of fires it began to create the notion that we were letting them all burn. When in fact, we weren't. But, in a fast moving situation, unless you are well schooled in communicating your ideas very simply you never catch up with it. It just gets away from you. Governor Evans of Idaho became very upset with what he believed to be the policy in effect. The chief then, Max Peterson, was relatively new at the time, and I was new in the job. We went out to explain this policy and what we were doing. By the time it was all over, we knew we had some work to do internally. Which we did. By about 1980, the next fire season, we had revamped the way we expressed our policy. And tightened it up a great deal, struck terminology that was inconsistent with our objectives and concentrated on training. And that's pretty much the policy we have today. One which provides for the natural prescribed fires in areas where they are appropriate.

Then in 1980, we had a circumstance that caused us to review our prescribed burning policy; that is planned ignitions. And that was on the Huron-Manistee with the Mack Lake fire. The forest set out to burn three or four hundred acres of kirtland warbler habitat. Forty thousand acres later, after the death of a fireman, and some structural improvement loss, the fire was controlled. We found flaws in the way we were conducting prescribed fire policy in terms of training, qualifications, and attention to prescriptions. We set to work on and strengthening that. And we did. We have a very rigorous prescribed burning policy now. We have a very rigorous fire suppression policy now. And it clearly distinguishes the differences between wildfire, and prescribed fire. A prescribed fire might start from natural ignitions or it might be from planned man caused ignitions but there's no question that the objectives in a prescribed fire are to accomplish certain desirable effects of fire. And with a wildfire, the objective is to get the fire out. Although within that objective you try to be cost effective and safe. And it may call for more aggressive or less aggressive tactics, depending on what the

situation is. But your objective is ultimately to control it. In achieving control, you may first try to confine it to a drainage, and contain it so it doesn't spread, and later control it. But, we're clear that there are only two kinds of fire: prescribed and wild. That's pretty much the policy that's survived the last seven or eight years. And was in place when the fire season in 1988 Yellowstone came along.

: You mentioned that terminology differences created problems and misunderstanding both publicly and internally within the Forest Service in either the '79 or '80 fire season. This year you're bringing in a whole new set, another major acting agency and then various other agencies in the Incident Command System. Do you think that those same sort of problems led to some of the confusion, namely in the media, this year?

: Not only in the media, but it led to problems between the agencies and communicating with . . .

: Do you want to elaborate on that?

: . . . with the people involved in the action. There existed a difference of view about natural prescribed fire and wildfire and appropriate suppression responses between the Forest Service and the Park Service. Now, presumably this had all been ironed out through the National Wildfire Coordinating Group of which the Park Service, the Forest Service, the BLM, the BIA, and the State Foresters are all party. But, in fact, on the ground confusion remained. What you call things becomes important. If something is called a wildfire in the Forest Service you can't return it to a prescribed fire, it's a wildfire and your objective is suppression. Well, if in the course of events it crosses a boundary and somebody inadvertently, unknowingly, or with purpose, checks a box and calls it a prescribed fire again, it raises all sorts of questions about what the objectives are. When the Forest Service had it the objective was clear; to catch the fire and suppress it. Well, now all of a sudden if somebody says that its a prescribed fire again then the objective is different. And that is a problem because the records apparently show in some cases this flip-flopping from one to the other. What's important to note is the action on the ground may not have been any different under a natural prescribed fire or a wildfire. But when you go through the record and talk about objectives--what people were trying to accomplish--it's very difficult to reach the conclusion that we really had our act together, were communicating clearly and were calling things the same. It led to confusion. Of course, the public media and the press were reviewing the records and talking to people. If you get a different answer to the same question, even though it may be well intentioned and unknowing about terminology, it does cause confusion.

: Maybe you could comment on when the Incident Command System was brought into play in this years fire event in the Yellowstone area. And also talk about the formation of Area Command and other aspects of interagency coordination.

: The Incident Command System is an innovation which grew out of a project called Firescope. And Firescope took shape in the late '70s, middle to late '70s, in response to situations in southern California where there were multiple jurisdictions having to respond to the same fire. The reason it is called incident is because you might have a flood or an earthquake and virtually the same organizations would have responsibility to respond. And the same need for common terminology, common ways of communicating working together would be necessary so it's called an Incident Command System. Although that system was developed in

southern California, it rapidly became apparent that in areas like the Wasatch Front outside of Salt Lake City, the Front Ranges in Colorado, in all of those places the Incident Command System would be applicable too. So the National Wildfire Coordinating Group, representing all of these agencies, agreed that this was the direction that we wanted to head. We were going to adopt this terminology, develop the training and we were going to make a shift to that form of operating. Now, that was a second major change in fire. It has not been talked about a great deal. It was a significant change because up until that point we operated under what was called a project fire organization. And everybody in the wildland, forest fire or range land fire business, at least in the federal agencies and most of the state forest agencies, talked in terms of a fire boss, a line boss, a sector boss, a plans chief. We grew up for twenty of the thirty years I've been in the outfit with that organization. Then it changed. Some of us still haven't got all of the nuances and terminology straight yet. But it's a significant change that people had to adopt and react to, be trained in, and operate under. We've pretty much got the wrinkles ironed out of that but the change in operations and organization was nearly as significant a change as the fundamental change of policy.

DP: How long has Incident Command System been part of . . . ?

GC: Since about, I'm going to say, it began to be adopted in the late '70s. And by the mid '80s it was pretty well inculcated in any significant incident. But, we can't underestimate the effect that had in people having to revamp how they formed up fire organizations. What it did for us in Yellowstone, for an example, is allow community fire departments and county fire departments to be integrated into the wildland fire organization much more rapidly than was heretofore possible. And in fact, it worked alright there, but it's worked better in places where they have practiced it, drilled it, understand it, use it every year. And you don't do that every year in Yellowstone. That was an event that called into place people who hadn't been used in that sort of situation for many, many years. And unless you drill in it, practice in it, and are prepared for it, you have some start up time. But, the Incident Command System has a level of coordination called Area Command. It is triggered at the extent in which the various incidents have grown to the point that they need coordination. It was clear that level was needed in late July, mid to late July.

DP: How and by whom was that decision made?

GC: Well, in this case it was made by the three regional foresters and the regional director of the Park Service. Now, John Mumma and Stan Tixier weren't personally available for a telephone call. After talking with Lorraine Mintzmyer, regional director of the Park Service, and my regional fire director, Tom Quinn, we had a conference call with Jim Mann who is regional fire director in Missoula, and with Doug Bird who is regional fire director in Ogden for Region 4. We agreed that the time had come to set in place a higher level of coordination and command and that was done. Jim had a person that was available and trained by the name of Troy Kurth and within twenty-four hours he was in place and operating.

DP: Okay. Overall how do you see the coordination effort between, I guess there's two major players here, the Park Service and the Forest Service and other players?

GC: Overall I think, our coordination was adequate. That was probably the highest level of adjective you could put on it. Had it been better, sooner, we would not have had the differences between our fire management

plans that became evident during these fires. But, we knew about that. We learned it during the putting together of our aggregation of forest and park plans. We knew that, well, in the fall of 1987 and when we published that aggregation, we knew we had some problems in fire management direction between the Park and the forests and between the forests. But we didn't get the chance to correct that prior to the 1988 fire season. We knew we had a problem. We planned to address the problem. We had a position (team leader) that we set in place brand new that winter to get started on improving this thing and we didn't get it done. The Greater Yellowstone Area Coordination Committee, I think, served a valuable coordination function. We already had the mating dances over. We could call a meeting and we knew who was going to come, how to behave and how to act and work together. I think that worked pretty darn well. The team leader position we had in place, Jack Troyer, was invaluable. I don't think that the thousands of people coming in to that fire suppression effort could have been organized as effectively at the outset had the Coordination Committee not set the ground work for that to happen. I think we could have done things better. And, we have a review underway now, which is not yet complete, to help us sort out those things that might have been done differently. And, we're looking forward to having that benefit of that report. But, you know, I think, that the coordination certainly could have been improved and needs to be in the future, there's no question about it.

[TAPE INTERRUPTED]

DP: We mentioned earlier, talking about how sometimes differences in terminology might have created some confusion. And also, that there's been two major changes, one being the change of fire policy. Two being, I guess, the change in organizations dealing with fire suppression. How fully changed, obviously the policies changed, but the people effecting the policy have, you know, like you said yourself have, you grew up under the project fire organization. How effectively have people in the agency been aculturated to these two changes?

GC: Well, I think, it varies directly with the amount of time you've spent dealing in fire management in the last ten years. If you have been involved in that on a regular basis I think, people are pretty well up to speed, if you haven't been you've been left way behind. And we found some of that this summer. The fire suppression, or the management level in the Park Service, and I suspect there's management level people in the Forest Service also, had no idea what an Area Command was or did. I mean we said we're going to set an Area Command in place and that's well, fine, okay. But in terms of really grasping how you organize it and deal with a situation like this there wasn't a wealth of knowledge and experience there. Those of us who have been involved in fire sometimes take for granted that knowledge of fire organizations, how they're supposed to operate and relate to one another, and work, is wider spread than it is.

DP: Let's just take this question straight as it comes off my contract. From you're perspective comment on public reaction to the fire management strategies and policy. Was there any influence of that public reaction on subsequent decisions as event progressed?

GC: Well, public reaction, I think, was fairly predictable. Early in the season there was not a great deal of concern. By mid-season the anxiety began to grow and by late August and early September it was at a fever pitch. I think that's predictable and I think it was justified. I think the public had heard enough about the benefits of fire long before the

federal agencies stopped talking about the benefits of fire. I think they were ready to hear both the Park Service and the Forest Service say that enough is enough, we're going to start putting fires out, long before it was said. I think that the public didn't believe the Park Service was serious about controlling these fires. And we're limiting our discussion here to the Yellowstone, but to be fair we need to point out that there were fires elsewhere in the West on national forest system land where people didn't think Forest Service was serious. So . . .

DP: Outside the Yellowstone area?

GC: . . . Yeah. Inside the Yellowstone area, the attention focused on the Park Service. But, to be fair we need to point out the same point of view was held . . . .

DP: What would some of the major areas be?

GC: Well, the Canyon Creek fire for instance and elsewhere in Region 1. There was similar dissatisfaction expressed when that came roaring out of the wilderness area. But to talk about the Yellowstone the references to the benefits of fire and the ecological role of fire, and the scientific correctness of policy fell on deaf ears long before the rhetoric changed. And I think that the Park Service fell victim to the same thing that the Forest Service fell victim to when we had the fire season in 1979 in that all of the things that went wrong were laid at the door step of the this so called "let burn" policy. When in fact, of the thirteen major fires that were tracked for months and months, only five of them had ever been prescribed natural fires. And the rest of them, whether they were lightning or man caused, hadn't been subject to that particular policy. But it all got lost. It all got wrapped into this so called "let burn" policy and everything was the fault of it. Well, there were fires that burned into the Park from out of the forests to at least as large a degree as burned from the Park out onto the forests. And that never really got sorted out in the publics' minds. It was just simply too complex to develop in a thirty second news bite and it just got wrapped into this "let burn" policy.

DP: So most of the attention and blame was focused on the Park.

GC: And the second side of that was the perception, and it was pervasive, that the Park Service was hampering fire suppression efforts by putting restrictions on. That the fire suppression effort was not as aggressive as it should have been. That the use of heavy equipment and technology could have kept those fires from being as large as they got. And this is all wrapped up in the publics' notion that the Park Service, and I suppose the Forest Service in wilderness, really wanted this historic natural event. And some people I think, believe that to this day. Well, we're talking about public perceptions not what reality is. And the fire reviews that were conducted have pointed out that, although use of heavy equipment in some cases might have built line around a fire, the likelihood of holding that line and containing the fire was fifty-fifty even if all of the resources had been brought to bear on 'em. And of course there were more than one fire, so of course you couldn't bring all of the resources. That very early, once the fires had been allowed to grow beyond the initial attack phases, the conditions were such that they simply wouldn't be denied.

But those are all things that went up in smoke. The opportunities to control 'em went up in smoke. The opportunity to communicate effectively about the differences between wildfire and prescribed fire, between what was happening in terms of man caused fires and lightning fires, the

differences there, that all went up in smoke. It was simply too large, too catastrophic, too threatening, too frightening, too costly for people to accept that there was any rational basis for what was happening at all. And I can understand that. I don't care how biologically sound, or scientifically correct a policy is; or how correct a suppression decision might be that isn't full scale aggressiveness, when people are scared, when homes are threatened, when their livelihood is being effected, they want action. People will accept that we might try and fail; what they will not accept is if they believe we don't try. And that's what they think. The effect of public opinion on the size of the fire, I don't think was anything at all. Because beyond a certain point, as soon as the chance came, the firefighters were doing all they could to contain the fires--but certainly public opinion caused some friction between the Park Service and the Forest Service. It exasperated an already difficult situation. It frustrated top notch firefighters who weren't used to losing the squirrel every day. And so it definitely had an effect on people's attitudes.

DP: Morale?

GC: Morale and other things. Although public support for the firefighters themselves was very, very loud. And I think the firefighters had a good feeling. But that there was rarely a good word for the management or policy makers. And again, I think that's understandable. I don't think there were many credits due at that point.

DP: How much did that impact on your office and the Forest Services as a whole in comparison with the Park. Talking about managers and policy makers.

GC: It didn't. The truth is our policy and our actions from about the 21st of July on was full, all out aggressive fire suppression. We never did have in this region a prescribed natural fire all season--anywhere. It was simply too dry, too hot, too foolish. And we knew that because we had been fighting fires since early spring in the Black Hills and it had simply moved from across South Dakota, across Wyoming. We had large, difficult to control fires even on the Shoshone. And it was simply not the time or place to be doing anything but trying to control fires as soon as you could. So in terms of the public outcry, it simply reinforced, from our point of view, what we believed ought to be done, and what we were trying to do.

DP: Was there much of a public outcry against the Forest Service, I guess you have mentioned a few cases up in Region 1.

GC: Well, I think by-in-large, peoples' perception was that the Forest Service was trying to put the fires out and the Park Service wasn't. Elsewhere in Region 1, the Forest Service came in for criticism over allowing a fire to grow very large and then not being able to contain it. And it caused substantial damage to private property and private land. The reaction was similar there as it was in the Park. But I do think that the public, although it began to get confused, have a different perception that remains between what the Forest Service did and what the Park Service did. It's probably more stark and more dramatic than it warrants because the Park Service intentions to control the fires were clear in mid August, but the options to effect that, the options to control them had deteriorated to the point that the fires weren't under control. And again, the difficulty of controlling those fires, the risk of putting firefighters on the line, the likelihood of holding a line built even by dozers, those all factor into the decisions that were made. And what the

general public sees is the results: that dozers aren't used, that line isn't built, that firefighters aren't out there aggressively fighting. That's what people see. And they interpret that to mean that, hell they're just letting them go. When the fact is that they have been good decisions at the time given the information. But all of those intentions go up in smoke because there just isn't time and the ability to communicate the complexity of it.

DP: Did much of the political interests, both in the public, the congressional sector or in the agency sector impact on your office or the Forest Service as it did as much as it did to the Park?

GC: Well, it impacted, but I don't think that it changed what we did any. But it impacted it certainly, it takes time to deal with those things among other things. But, also it gave us an opportunity to capture the awareness and the interest for some very positive things. For instance, we had been trying for years to get a bill through Congress that would allow Canadian firefighters and fire equipment to come into this country and help. Well, we were never able to get it done. It just didn't have enough appeal and interest. There was concern about people out of work in this country. All of those things seemed more important. Well, not this summer! As soon as that became something that Congress could do, they did it. So, the awareness and interest was not all negative. There were some positive things that came out of it.

)P: Talk about some of the positive things that have come out of this years fire season. Particularly in the Yellowstone area.

GC: I think the fire policy review that has just been completed will strengthen policy and strengthen the subsequent actions a great deal. I think the agencies had drifted into some complacency, into some very high risk decisions that were unwarranted and not in public interest. And I think this review causes us to step back and put these plans into much better condition. And will allow us in the future to manage fire much more responsibly than would have been the case absent an event of this magnitude. It takes an event to change public attitude, change public perception. Heretofore when a fire management plan would be talked about it drew very little interest, very little comment. In fact the Yellowstone Park plan drew very little comment or interest. People simply didn't see it as something that affected them. I don't think that will be the case for the next several years. I think the public will have a high level of interest in what we do. So, I think that's a plus. But you have to really, in my view, grasp at things to find something positive about this last year because I'm not one of those who think that this was an event to be desired. Even given the biological neutrality of it. Fire is neither good nor bad until you put some value on it. It just is. And there will be some biological benefit from those who are looking at the regeneration of the forest, looking at new growth and all that kind of stuff.

P: Species specific whether it's benefit or not.

C: Yeah, well the lodgepole pine had degenerated in Yellowstone Park and some of the surrounding wilderness areas because no activity at all goes on. There's no logging to remove it, nothing to cause it to do anything other than to grow old, get attacked by insects, disease, wind throw and die. So, it's hundreds of years of solar energy stored up there just waiting to be released. But, it's one thing to say that it's biologically a natural event. It's another thing to say it's good public policy. An event of this size and the effect of it is clearly, in my view, not good

public policy. The effects on the national forest are severe and they're measurable because we lost on the Shoshone National Forest probably, oh I don't know the figures aren't firm yet, let's say 50 percent of the production capacity of commercial timber on the Shoshone National Forest. We'll have about two years worth of salvage work and then the companies are going to go out of business, either that or move. Because for the next sixty to eighty years there isn't going to be any commercial sized timber on the north half of the Shoshone National Forest. It's gone, it's burned up, or salvage. Now that's not a large operation in the sense of the northwest coastal douglas fir and those very large operations. But, it is very significant for the community of Cody, for Crandall, for that area, for the company, and the people whose jobs are effected. And the steep slopes on the Shoshone National Forest burned very heavy, very severely. We have to be concerned about sedimentation, about the fisheries that are going to be effected. We have to hope to get a rainfall regimen this winter and spring that doesn't cause wide spread flooding and tremendous damage. All of those things to me are indicators of a disaster not a windfall. Not something to be desired. So, that's why I think that we have to look pretty hard to find something good about what happened.

I think that there were some outstanding examples of firefighting done to save structures, save lives. I think that some people learned some things about fire suppression in extreme conditions, about saving communities in extreme conditions. I think there was some excellent training going on. I think there's some long term benefits on how to deal with similar situations in the future. But, underneath all of that you hope you never have to deal with another one, at least of that magnitude.

DP: Tell me about the agency sponsored reviews, I know there's several.

GC: Well, the Greater Yellowstone Area Coordination Committee set in motion five reviews. We brought in experienced people from outside the Yellowstone area so that they would have objectivity and benefit of distance, and the benefit of not reporting directly to those they were going to be reviewing. And we reviewed four specific fires, or combination of fires: the Clover-Mist, the Huck-Mink, the Hellroaring, Storm Creek, and the North Fork. The fifth one was a review of Area Command and the functioning of the Coordination Committee itself. So those are five reviews chartered by the Yellowstone Coordination Committee. A separate review and independent of those five was the fire policy review chartered by the Secretary of Interior and Secretary of Agriculture. And that was a review of federal fire policy. And it was not limited to Yellowstone, although clearly Yellowstone was why it was chartered. Because the federal policy applies across the board not just to Yellowstone. And they looked at fire policy in parks and wilderness and those are the six reviews that have been completed.

DP: Has the one on Area Command actually been done yet?

GC: Well, no. We reviewed a working draft, but there's a good deal more work to be done on it, it's in process.

DP: Okay. An open ended question, anything that you'd like to be left with the historical record?

GC: Well, this event severely tested the interagency relationships between people who had up to this point worked pretty well together. I think it pointed out to us some of the limits of our working relationships. It pointed out to me, more clearly than anything I've ever

seen the differences between the two organizations. But it also pointed out the similarities in the people we serve. The constituency that we have in the national forest system were just as worried about the Park as the constituency that the Park might typically think of. When I first rode up horseback on the edge of the Clover-Mist fire, it was about July 15. I could look at it and turn in the saddle to look back over my shoulder at the Mink fire on the Bridger-Teton. It had a huge cloud in the air of maybe twenty, twenty-five thousand feet. And I just couldn't believe that these were fires that were anything but wildfires. Later, I told Steve Mealey and Jack Troyer that this was not business as usual.

[TAPE INTERRUPTED]

GC: It was just remarkable to see the situation deteriorate with one fire building on another and the demands exceeding our capacity to respond to them. And yet see the organization function as well as it did under those conditions. I suppose history will focus on what was burned. But what I hope that people would recognize is that there were some heroic actions on the part of the fire teams and the firefighters. And there were many more resources saved than there were burned--structures, historic buildings, peoples' homes. I hope that somewhere in all the discussions that those things are pointed out from time to time.

DP: Well, thanks for your time, it's been very interesting.

nterviewee: Bob Dennee, Public Affairs Officer, Gallatin National Forest, Bozeman, Montana.

nterviewer: David W. Peterson

ubject: 1988 Greater Yellowstone Area Fires

ate: 13 December 1988

D: I'm Bob Dennee and I'm the public affairs staff officer on the Gallatin National Forest. The Gallatin Forest was close to the center of the activity when it came to the Greater Yellowstone Area fires. Although a lot of the national publicity was directed at the Park Service and Yellowstone Park, much of the Forest Service activity occurred in and around the Gallatin National Forest.

I was quite heavily involved not only with media responsibilities (answering their questions and providing information), but also in the political interest. There was a tremendous amount of political interest in the fires this summer. The first major visit came from Interior Secretary Hodel. Hodel visited the fires in July and we worked with the Park Service in coordinating a tour, and a visit and a press conference, and briefings with the incident commanders and also the area commanders out of West Yellowstone. Secretary Hodel's first trip was an informal visit early in the summer. It was interesting at that time to listen to Secretary Hodel defend the policies of the Forest Service and the Park Service and to support the firefighting efforts. He went to great lengths to defend allowing some fires to burn under certain conditions within Yellowstone Park, which is what most of the press was questioning at that time. And that was early in the summer, early in July.

We then had a formal visit from three cabinet Secretaries, Agriculture Secretary Lyng, Interior Secretary Hodel, and then Assistant Secretary of the Army William Taft, III. Their visit came at the request of the President to formally review the fire situation in and around Yellowstone Park, and to make recommendations back to the President. What came out of their review, by the way, was an identification of additional firefighter needs, additional support, additional people, aircraft, etc. But again, overall, they expressed support for the agency policies and the firefighting efforts. That was really an interesting visit. They flew into West Yellowstone and were greeted by several of the governors (Montana, Idaho and Wyoming), and by the chief of the Forest Service and several regional foresters and Lorraine Mintzmyer, regional director of the Park Service in Denver. I think they got a good look at the overall situation. We provided a bus tour through the burned-over areas and the Secretaries and the press got a good feel for what was happening. After the tour, they went back to West Yellowstone and held a public meeting and press conference in the Federation of Fly Fishing (FFF) building with

about two hundred people attending. They received some difficult and sometimes heated questions, particularly from some of the local communities that were being threatened by fire.

Shortly after that visit, I think it was two weeks later during the main throes of the campaign for President, that we learned that Governor Dukakis was coming to visit the fires. And so we spent several days getting ready for that visit, coordinating with the Park and with the Dukakis' front people, who were here in Bozeman. I had never experienced anything like that. The Dukakis people really had no feel or idea what the agencies role normally is in a formal visit of this nature. They wanted to go in and set up a review, a visit by Governor Dukakis, totally on their own. And they just weren't getting anywhere in their planning efforts. Finally we got hold of some of their chief staff people in Bozeman and in Boston and said, "if you're going to make this happen, you need to work with the agencies. We can help make it happen. We can make the arrangements for the tours, the press conferences, and what ever else you need we'll be glad to help you do it." Well, it was only a day before Governor Dukakis was scheduled to arrive that we finally reached that understanding. An it was a hectic time! The key thing the Dukakis people wanted was a suitable place for the candidate to be briefed by Park Superintendent Barbee and other officials, and to capture national media coverage with the right back drop, to make the right national impression or image. So we spend a lot of time traveling around in the Park, and near the Park, looking at different back drops until they finally selected the site they wanted. Then we spent considerable time specifically designing where Governor Dukakis would stand, where the various officials would sit, where all the media would be located, and how he would walk from transportation (which turned out to be a bus).

That was another whole issue--how he would travel to that site. Just every little detail was discussed and planned. I learned a great deal about how to do a big time production. That's what it was, a production, more so than an in depth review. It was to make an impression on the American public. Anyway, he traveled with two airplanes, one for the Governor and his staff, and the other for about 250 reporters. And they landed in tiny West Yellowstone, which is another interesting story. The Dukakis staff didn't feel they could land in West Yellowstone. They didn't think the airport could handle that size of plane. It easily could. The agencies were landing military C-130 transport planes which carry large trucks and firefighting equipment inside. So, we finally convinced them, yes they could land in West Yellowstone and eliminate a two hour drive from Bozeman to West Yellowstone. When the Dukakis group landed, they were joined by the governors from Idaho, Montana, Wyoming, and Colorado, several congressmen and senators, and agency officials, including the regional foresters, the chief, the Park Service regional director, and several other people. These people all rode together in the lead bus, and there were three back up buses for staff and local media. They traveled out to the chosen site, where a short briefing was held. The Governor then was briefed by Forest Service and Park Service area commanders and incident commanders. Then he had an informal press conference and photo opportunity. The whole thing only took about two hours.

The interest and the security was tremendous. A lot of security people were present because it was an outdoor, uncontrolled kind of a setting. One of the things that the security people did want was a one

way road where they could drive in, block it off, and later go out another way. Anyway, that was a big production. The national media coverage was kind of anticlimactic because the fires where on the down side of the public interest curve, and it was weeks after the administration had sent out the Secretaries to review the situation. Plus, the big news on that day and the following day was the hurricane off the coast of Texas, so Dukakis' visit didn't get a lot of coverage. He did use the trip later in his campaign. We noticed several times later in his campaign where his visit to Greater Yellowstone was highlighted, but during those couple of days it didn't receive broad coverage. In fact, he received some criticism because there aren't very many voters out here, and people wondered why he was here.

So, that's the kind of thing that I got involved with, planning logistics, arranging for press conferences, working with the staff and the public affairs people of theses VIPs, and making sure everything went smoothly. And then also on our end, making arrangements for regional foresters and forest supervisors, and the chief. We handled things like motel rooms, vehicles, schedules and preparation of briefing information. One of our concerns was to ensure unified and coordinated effort between the Park Service and Forest Service. So we worked closely with the Park Service to try to keep everything as positive and coordinated as possible.

DP: So was there a conscious planning effort between the information offices?

BD: Yes, We were both aware of the significance of what was happening this summer, and the importance of communicating similar messages and talking about the interagency coordination. Yes, I would say there was a conscious effort to make sure that message came across. Perhaps more so on the part of the Forest Service than the Park Service. The Park Service was under a tremendous amount of pressure, and I would say their first priority was the survival of their Park, their superintendent, and the fire policy. Area Command at West Yellowstone was a Park Service and Forest Service Unified Area Command. Both the Forest Service and the Park Service supported the Unified Area Command, and stressed joint decision making by the Park Service and the Forest Service. Of course, behind the scenes there was a lot of discussion about just what should occur. Just the placement of the Area Command at West Yellowstone was an interesting decision. West is considered the Forest Service firefighting headquarters for this part of the country, rather than Mammoth, which is considered the Park Service administrative headquarters. The Park Service would have preferred initially to have see Area Command located at Mammoth. But Area Command did function to make those kind of coordinating decisions for all the fires within Greater Yellowstone. I think it worked overall. Sure there were some mistakes and things that didn't get done as soon or as well as they should have. But I was impressed by the way the Park Service and the Forest Service kind of grew together during this difficult situation.

DP: You mentioned how there was congressional interest?

BD: Right. Some of the earliest congressional interest came from Wyoming. Their senators, Wallop and Simpson, were some of the first political leaders to be publicly critical of the firefighting efforts and of the agency policies. At one point in time, I recall they made statements to the media that Superintendent Barbee should resign, that the fire policy needed to be scrapped. If you recall I talked about the informal July visit by Secretary Hodel. It was the Wyoming delegation

that was instrumental in getting Hodel out here to review what was going on.

I see Hodel as a person caught in the middle between some political pressure from Wyoming and his agency, the Park Service. He was trying to be responsive to them and still defend his agency. Secretary Hodel stressed the flexibility in the policy. For example, there's opportunity for some fires to burn under certain conditions, but if conditions become too extreme or if they become life-threatening, then the fires can be suppressed. It was shortly after that visit that the Park Service announced they were going to attempt to suppress all of the fires and that no new fires would be allowed to burn. So, anyway, it was the Wyoming delegation that first criticized the policy. And they were critical also of the director of the Park Service, Mr. Mott. The Montana delegation, which is the one I'm more familiar with and watched most closely, was interesting. We saw a number of different responses to the fires. One of the first responses was from Senator Baucus. He was critical of the policy and said that more needs to be done, more resources need to be put into the firefighting effort. And he was critical also of the Forest Service. Senator Melcher called for a complete review of the policies and asked that hearings be held in Washington. Congressman Marlenee was very interested in the communities, particularly the Cook City, Silver Gate area. He, I think, termed it a "fiasco" when the fires where probably at the height of their intensity, and those communities were threatened. Ron Marlenee spoke out loudly and is still critical today. Congressman Pat Williams seemed genuinely concerned for the firefighting effort. He was the most supportive. He defended the agencies and he probably spent the most time looking at what actually occurred on the ground. He spent the day with Dukakis and he took another whole day and just toured the fires with our Forest Supervisor Bob Gibson. So we saw a range of responses and a similar range of responses in Idaho.

I think that now, in hindsight, with the fires, people are now talking about the long term benefits. Wildlife, vegetation, and the fact that Yellowstone did survive and that actually there's an expectation that tourism will be on the increase, that we're not hearing sharp criticism from the delegation at this point in time. We've had a number of reviews done, some analysis where we could have done things differently. But, by-and-large, I feel the policy will remain but with better coordination and some changes to the policy. There's been a noticeable absence of criticism from the delegation. I think there's more understanding and cooler heads are prevailing. I really expect that the fire policies will survive and that's important.

DP: How about local entities?

D: Environmental groups almost without exception were very supportive of prescribed fire and allowing fire to play a natural role in the ecosystem. They see support for fire as critical, of course. Because they support wilderness and oppose most timber harvest, they support the use of fire. And so they did. The timber industry was very critical and pointed to the loss, the tremendous loss of timber volumes and argued that some of this wood could have been better utilized if it had been harvested. I was actually surprised at how much support or at least silence and lack of criticism we received from the various interest groups. Where we saw the criticism was more from the community leaders, the people that own businesses, mayors, or that type of individual who normally would be quite supportive of the Forest Service. They saw their

communities threatened and again it was during the height of the fire season when the communities were being threatened and the fires were out of control that we received the most criticism. The Billings area was very critical. Billings tends to be more oriented, development-oriented community than Bozeman, which is more an environmentally oriented community.

DP:: Comment on what you know of the review process.

BD: Yes. They're several reviews going on at the same time. The National Fire Policy review team did come to Bozeman and interviewed local community leaders, including the county commissioners and the president of Montana State University, several other community leaders, the chamber of commerce, and some of the environmental group leaders to get their impressions about the policy and the '88 fire season. Their results are being reported back to the Secretaries. There are also review teams assigned by the Greater Yellowstone Coordinating Committee (GYCC) to review fires just in Greater yellowstone. And I'm sure you're very familiar with their reports. They reported to GYCC in Denver I believe two weeks ago. That's been in the newspaper. Then there are reviews of individual fires being held, internal kinds of reviews that are still ongoing. So, there's just so many reviews that actually, for us in the agency, it's difficult to keep track of the status of each one, and what they're all saying. But for the most part, we're hearing retain the policy, improve coordination and some criticism of the Park Service for lack of what I'd call a scientific approach, lack of use of modeling and having good hard prediction data, not so much criticism of the Forest Service.

We haven't had the formal hearings that we expect at the congressional level, I understand those are still coming. Senator melcher wanted hearings, and of course he was defeated in the recent election. We've seen a number of the drafts of the review team reports that are now available, and available to the media too. A reporter named Bob Ekey for the Billings Gazette, did, in my opinion, the most thorough, objective, and professional reporting from day one through the summer of the Yellowstone fires. He's been assigned by the Billings Gazette (he lives in Bozeman by the Way) to do a book on what happened in the '88 fires in Yellowstone. He's just about done with his manuscript. So he has a wealth of information and he's very good. To share what he has would help you a great deal. I can get you the phone number. And both the Bozeman Chronicle and Billings Gazette issued special edition features for the fires.

DP: Is there anything else you'd like to say or impressions you have you'd like to share?

BD: Well, one thing is, have you seen a detailed report that Jack Neckels, the chairman of the task force for Greater yellowstone fires, put together?

DP: Yes, I've seen it. I have a draft but I did not have it in my hands until Friday.

BD: I think this is the best overall compilation of information that I have seen. This is a preliminary draft here. But there is a later version, you know.

DP: Any other sources of information that you can think of?

BD: On thing you should know is the Park Service in Mammoth has agreed to coordinate all of the cataloging, and distribution of all the slides, video tape and other visuals. So they are doing that. I don't know if

you would use any of that, but that's where all the material is. Joan Anzelmo and Amy Vanderbilt are the two public affairs people at Mammoth in Yellowstone Park. And there's two completed videos, one called Yellowstone Fires '88. It's very good, about twenty minutes in length. I could loan you either of these. The second one is on fire rehabilitation and that's also available now. It's only about eleven minutes.

[TAPE INTERRUPTED]BD: The Park Service has a longer video that I think actually the Bridger-Teton Forest did. I haven't seen it but I've heard it's good too. If nothing else, if you get a chance to spend an hour with Bob Ekey, that would probably be worthwhile. The guy spent his whole summer reporting on the fires, and he's spent the last three months writing a book about the fires. And he's very objective. There's no better source I know of right not for information.

DP: Thanks.

nterviewee: Ed Francis, Ranch Manager, Royal Teton Ranch, and Vice President, Church Universal and Triumphant, Gardiner, Montana.

nterviewer: David W. Peterson

ubject: 1988 Greater Yellowstone Area Fires

ate: 22 September 1988

DP: I'm impressed with this area, earlier on this morning I took a drive out through here it seems quite prosperous, it's nice.

EF: Thanks.

DP: I don't know where the best place to start would be. Maybe to have you show where ranch is on the map?

EF: We run, starting at section 21, include that section, section 9, 3, 35, most of 26, I'm sorry 25 I mean. And up here, and back up behind Cutler Lake, we include 23 and 15. Also back up here, okay, down to the river, there's a few little pieces in there that we don't own.

DP: So it's quite sizable.

EF: Yeah, it's about 15,000 acres right in this area.

DP: Now, I guess, it was the Fan fire that was your major concern at the beginning of August, right?

EF: Right, it came all the way up, okay it burned all around Sportsman Lake, it came all the way up here to about Meldrum Mountain and Crag Lake right in there and went down and then it had another arm that came up here, but it burned all around Sportsman Lake and burned all up against this. There's a trail that goes up here and burned all up around that up against the peaks, and the rim back up here. And then there were some spot fires that got down within a couple of hundred yards of the line right down here.

DP: So pretty close?

EF: Yeah, petty close. Considering how fast it can run in a day, you know, it got about as close as it could get without really, you know, burning in there pretty good. I think that fire was about 25,000 acres or so right down in here. That's was one of the first fires that really got out of control, in fact, it was the first one that threatened any private property. That was on the 1st of August. We had a real windy day and up until that time, there were no active fighting going on that fire at all. Everybody was real edgy about it. I had written a letter to Barbee about a week before that basically begging that he do something about it. And then there was a press conference when Hodel came out here the first time. And there was a petition presented to him signed by I think, that 350 people, asking 'em to do something. Basically asking them if they'd put the fires out, but particularly the Fan fire, cause that's the one threatening, there's a bunch of other private land on up in Cinnabar Basin here that if it had crossed the rim there it could have really been bad on

them. And they really never did anything, they, you know, claimed that everything was under control, you know. That it was within its containment boundaries, but the problem was that it's containment boundaries moved every day. As the fire would advance they had a new containment boundary. I don't know what they were doing, they were just thinking that, I guess that they were just hoping that it would stop or rain or something, you know. So, when it finally blew into, there's a divide in here that runs right through here, there's a little rim, okay, and something like that, yeah. And this is Moran Drainage here, and up until then it had been just in the Specimen Creek in the Fan Creek Drainage on the other side. And there was a really strong wind and it blew it into the drainage and it was pretty freaky. I mean, the whole area on up there was on fire, you know. And you really couldn't see what was going on until about seven or eight o'clock at night, you know, then it became real apparent what was going on. It was really burning up there. And everybody got really upset about it and I had a kind of heated argument with Dan Sholly on the phone that night. You know, he's the chief ranger. And, you know, he still started giving the same line, which was oh we're looking, we're watching it real closely and that's within the containment boundaries, and so on, you know. And basically I got really mad at him and told that we were sick of, you know, of hearing all their excuses and we were going to do whatever we could to bring any pressure that we could bring to bear. We were going to over their heads and do anything we could, you know, to get this policy changed. And the rest of the people, like up in Cinnabar Basin they felt the same way. And everybody just basically just started getting on the phone calling Washington D.C. and everybody else. And you know, within a few, within a couple of days, you know, they really went to town on it.

DP: What sort of pressure?

EF: Senators and congressmen.

DP: Senators and congressmen and they . . . .

EF: Called Melcher's office and Williams, Marlenee, Bauckus, anybody, anybody. I had Bob Gibson on the phone a bunch of times, he's the Forest Supervisor for the Gallatin Forest. Forest Service, you know, was not a problem to deal with, you know. They wanted these fires put out to begin with also. You know, they were real concerned about it, but there's basically nothing they could do, it was out of their hands. But, after that the fire was pretty much taken out of the Park Service hands, this fire was. I mean they had a, I guess, you probably know what a Class I team is?

DP: Yeah.

EF: They had a Class I team come in, a guy named Roy Montgomery. And, you know, they called all the shots from there on in and they had, I think, as much as 1,700 firefighters on this thing at one time.

DP: Yeah, they did.

EF: And a bunch of helicopters and the weather helped, you know. The wind got turned around, you know. It took 'em about a week or ten days to get everything under control, though. And it was burning quite a bit up in here for days after that. But it didn't advance significantly, you know, it advanced a little but not real bad after that.

DP: So, would your main criticism be just the general policy or the unresponsiveness of the Park to the situation and to your and other peoples interests?

EF: Well, do you know much about the past history of our dealing with Yellowstone Park?

DP: No, I don't.

EF: It's pretty bad.

DP: I've heard some.

EF: It's been pretty poor. There was an EIS (Environmental Impact Statement) that was done by the State of Montana that was just release earlier this year. And they were real outspoken on it, they just went out of their way to challenge anything they could and I could give you some material on it if you're interested, but one of the things they did was they questioned, it's pretty strange but they actually went out of their way and question the validity of whether we're really religious organization or whether this is just some kind of business operation going on here, you know. I guess, they hope to, what they want to have happen is to, just anything that we want to do here they want to have it moved somewhere else. That's basically what they demand in their comments on EIS and they were real lengthy. They were about it, I think, fifteen or twenty pages long. I guess, my feeling on the fires is and I have some evidence to back this up, that they knew all along that this fire was pretty likely to burn out of the Park. I have a map that's got Don Despain's signature on it from early in July where it shows the likely, I can't remember the wording that he used, likely extent of the burning on that fire and it just shows it, you know.

DP: Burning through that drainage, what's this drainage again?

EF: Well, they cut it off at the Park boundaries. They didn't show anything outside of the Park but they showed the burning just going, you know, right to the Park boundary. There's nothing there to stop it. If it burns to that it's obviously it's going to burn out. I felt that what they did on these fires and the Fan fire is just an example, of it is that they, cause ever since 1972, you know, they haven't had very much burning that's taken place in the Park under this "let burn" policy. And, you know, they've been waiting for a good burn here for a long time and, I think that they, even though they knew it was a dry year and everything. I think, to begin with, you know, they relished the idea they were really going to get some good burnings, you know. And they really didn't take into consideration the risks involved of following that kind of policy. They evidently thought they could control things and, you know, they just ignored the fact that it was a really bad drought year and so on. And decided, I felt that they were going to let as much burn as could burn before political pressure was brought to bear, you know, to make them put it out. And I, you know, they just took a big chance. They spun the roulette wheel and rolled the dice or whatever, you know, it didn't come up with their number because along about the end of July they finally started realizing that, you know, they had a situation on their hands that was totally out of control. So, I don't think they've been really up front about the decisions that were made and, you know, who bears the responsibility for it. They act like, now they act like there was just no way these fires could have been put out, you know, under these conditions and so on. It wouldn't have made any difference if we had of just started fighting everything to begin with, there's just no way, you know. You're witnessing a historical event, your witnessing a one in 400 year event and natures responsible for it and then there's nothing that person can do to stop it. And I think that's just a bunch of baloney, I really do. If they had of gotten everything under control right at the beginning, these

things would never would have grown into the conflagrations with 300 miles perimeter that they ended up being, you know. A fire with a 5 mile perimeter is a heck of a lot different story than a fire with a 50 mile or 300 mile perimeter.

DP: Yeah, certainly.

F: This Fan fire down here, actually I think this map has another side to it, it shows more of the Park. Cause I followed this stuff really carefully all along. Okay. It got started down here on this little high area, right in here, it was a lightning strike. It was on about the 23rd of June. I remember it cause I could see the smoke the first day. And up until, oh, probably the first week in July, the thing still wasn't over 100 or 200 acres. It was a little bity fire, there was some pretty good smoke coming from it, but, I think, I recall about the 5th of July it was about 250 or 275 acres still. And, you know, they could have handled it easily, it just it would have been no problem at all. Then all of a sudden they had a hot windy day and all of a sudden it was two or three thousand acres practically over night, you know. And then it went from there. But they still, even at that point they still thought, wow, you know, this is really good we're going to get some burning out of things. And I don't think they ever considered it to be a problem until it actually started making these big runs 4 or 5 miles a day, you know, when it really started doing something. And they still didn't do anything about it and it was still probably a week after that before any significant amount of crews or aircraft or anything like that were put on it.

P: What do you foresee, this is just a hypothetical case, that pressure wasn't put on from you and some of these land owners over at Cinnabar Basin . . . ?

FF: I don't think philosophically that the people in the Park would have considered it a problem if it had burned up private forest, or national forest land because in their view fire is good. If it's good for the Park it's certainly good for private land and national forest lands surrounding it because, in their view, all of this land should be in the Park anyway. And, you know, they pretty much made that clear, cause if they don't think the Yellowstone Park in its current configuration is adequate they'd like it to be a lot bigger, you know. They think the so called "Greater Yellowstone Ecosystem" should all be in the Park. I don't think it's a proven theory at all that there is such a thing as the "Greater Yellowstone Ecosystem" or that there is any given island of an area that could function as an intact ecosystem because I think with the policies they follow, that sooner or later that area would be just as filled up with animals and just as filled up with the kind of problems they have right now and they'd be saying well gees, you know, we've got to have all these prairies out here and stuff, you know, cause the animals have to go someplace to eat during the winter. I don't, I really don't buy the argument. I think it's just, you know, they've got expansion ambitions and in their mind the Park boundary means practically nothing, you know. If fire burned out here they probably would have thought that's just as good. And I'm not just talking off the top of my head either. I know people who were up there hanging around that fire cash, you know, the so called "fire cash" up there in Yellowstone Park and they were listening to people joking about it and stuff like that, you know. It's just . . . .

P: About how it wouldn't hurt if it burned?

EF: Oh, they were joking about maybe if it would burn the churches land, you know. "Oh, oh, maybe this will burn the churches land," you know. They just had a real lackadaisical attitude about it. It wasn't until about the middle of August that things really got serious. They were laughing and joking and just, you know, everything was just . . .

DP: Do you think it's a . . . ?

EF: . . . you know, they were just having a great time up there. It's a party. You could call 'em on the phone and listen and here 'em in the background, you know, laughing and joking about everything. Everything was just great, they were not worried about a thing.

DP: Do you think there's any element of religious persecution involved?

EF: Oh, I don't know, maybe there is for some, I guess. I see it probably the other way around. I think that the Park, first of all that the federal government had the option to buy this ranch back in 1980 before we came into the picture. They had an option for a year and they let it pass. It was during the Carter administration. And they were really figuring on adding this you know, as public land, and when it didn't happen everybody was pretty upset about it and I think they just would like to get it back if they could. You know, I think they use the issue of the church and they let people kind of, you know, run away with rumors and stories about us and stuff like that make us sound pretty bad because it gets to their ultimate purpose, which is, if they can force us to leave the area, then they, you know, stand a good chance of getting the ranch back again.

DP: Do you think some of the press coverage of the churches role in these events has been kind of slanted?

EF: Well, I mean, you know, the press, they are, they can do anything that can help them sell newspapers.

DP: Yeah.

EF: And, you know, they've had some pretty juicy stories out of it. I'd say everybody has their own reason. There's certainly some people out of there, out there that have religious differences with us and motives. And, it's kind of a coalition, you know. There's a lot of people who saw the Park Service three or four months ago as riding white horses in the, you know, being the people that were going to force the church to get out of the area. And, you know, the Park Service probably saw those people as being, you know, their allies helping get rid of us so they could convert this area all to federal land which is just what they'd like to see happen. A lot of those same people now see the Park Service as the guys on the black horses and in the black hats, you know.

DP: I'd be . . .

EF: Things work in funny ways sometimes.

[TAPE INTERRUPTED]EF: He passed it to me more less anonymously, you know. And I wouldn't even be able to say who I got it from. But, he didn't like what was going on, you know. He felt they were lying, you know. They were dishing out a PR story, you know, that really didn't match what they knew, and it was already going on and was likely to happen. There were a lot of Forest Service guys who were concerned back in early to mid July that this thing was going to, you know, get out of hand. And they were going to loose control of it. And the Park Serviced line at that time was no problem, everything's under control. We're watching

it and their jargon for it is we're aggressively managing it. As far as being aggressively managing it, I found out later what aggressively manage means. All it means is that they got somebody up there watching it all the time. They didn't have any crews on it at all, it was just a bunch of baloney. It was just going wherever it wanted to go, you know, whatever it wanted to burn. Now there is a guy, have you heard the story on the North Fork fire?

P: No.

EF: There's actually a newspaper article on this that I just got today from the LA Times. In fact, I was the one in talking to the lady who wrote the article who suggested where she get her information, but, evidently when the North Fork fire started in the Targhee Forest it was just a couple of hundred yards from the Park line I guess, and they immediately went in there, they had equipment, they had bulldozers, they were really trying to stop it, but it slipped across the Park line. And, they immediately got on the phone and contacted Yellowstone Park and asked for permission to take their equipment inside, a little bit inside the Park and finish their line and they felt that they could stop it right there. And the Park Service, you know, just said no, you know, forget it, can't do that inside Yellowstone Park, you know. So, they went from bulldozers and pumper trucks and the whole bit, you know, up to the Park line and then all of a sudden it was guys trying to hack little six foot wide fire manual lines and all that kind of stuff which is really, in my opinion, the reason that this stuff got out of hand because they would never make a decision to allow a change in their policy until the situation got so critical that they saw that they had to. But by the time it got so critical they thought they had to it was too late. So, sure they cut a lot of bulldozer lines and stuff eventually, but it was too late, you know. It was two or three or four weeks too late by the time they finally agreed to let that start happening. They could have stopped that stuff of long time ago. That North Fork fire could have been stopped right there if they had a brought the resources that could have been brought in the beginning. And none of that would have happened, it would have stopped, I'm totally convinced of that. But, they're going to continue to, you know, to try and shed the blame and say that there is nothing that anybody could have done, you know, blaugh, blaugh, blaugh. But, there's a guy down in Targhee Forest who has now acknowledged that, you know . . .

DP: This is a line officer, like maybe . . . ?

EF: . . . district ranger.

P: A district ranger.

F: Right. You want the article?

DP: Yeah. Like I say I may have it but I haven't assimilated through, then again I might not.

F: I just got it in the mail this morning. Somebody sent it to me who had read it some place.

P: Have you read Alston Chase's, <u>Playing God in Yellowstone</u>?

F: I have not read the whole thing, but I'm fairly well familiar with it.

DP: Familiar with it?

F: Yeah.

DP: Do you think the Park Service is maybe more sensitive because of things such as that?

EF: Well they wrote a whole book, you know, trying to refute that, Wildlife in Transition.

DP: Yeah, Wildlife in Transition.

EF: And yeah, there super sensitive to it because really they are, you know, Alston Chase put their whole program to question. You know, this whole program that they've got going with natural regulation which is again is totally unproven theory. As a matter of fact, in Wildlife in Transition they admit that it's just a big experiment, they call it the great experiment or the grand experiment something like that. It's a big experiment and they've used Yellowstone as a big laboratory. You know, their experimenting up there. I don't think they really know what they're doing. And it's all philosophically bases. It's not really scientifically based that's the biggest problem that I have with it. They created a philosophical desire of how the Park should be managed, you know. It's almost like a belief that they have. And then they started assembling data to try and back it up and the data of course, all leads to the conclusion that, you know, this is the way that it has to be done. It's totally going in the wrong direction. You know, you're supposed to collect data and then draw a conclusion as to how it should be done. And they're doing it backwards.

I think that there almost all of their management decisions up there are keyed to following this philosophy, this theory of natural regulation as they call it. Rather than protecting resources they didn't have a resource based management system up there. It's all based on natural regulation. And I think that's the biggest problem and I think, that's basically Alston Chase's, his whole premise that, you know, they should make a decision in every case, you know, what to do to protect Yellowstone's resources, you know, what can best be done to protect Yellowstone's resources. You know, he cited the bears, where they just took off them off the dumps over night, you know. And pretty soon there's dead bears all over the place. There's a lot of things of other things they could have done, you know, to create the transition it would have saved a heck of a lot more bears. You know, they didn't have to take them off the dumps all at once. I think, he talks about fire and a lot of different things, there's a lot of different things they could do, you know. But, they have a philosophical bent against it. It's really my impression of the Park rangers and people that are in there that it's really more of a religion to them. The way that they do things is a philosophical religion, some people have called it a eco-religious experience, you know, and it really is. It's not a scientific resource based way of doing things. It's a religion to them. And that's why their not going to give it up easily.

DP: They're managing according to their tenants of faith?

EF: Essentially. I think so. I don't know if Alston Chase would go that far but that's what I believe is the case. Cause I've had a lot of interaction with them. And I know that they will, they'll just fall all over themselves to do things a certain way that fits in with their scheme of how it should be done rather than using some tried and proven method that everybody knows will work. Game management for example. Their just totally diametrically opposed to game management. So, therefore, you know, you've got these wildlife herds that are growing and growing and growing. Totally unchecked, you know, there's a number of things they

could do to control the growth of those herds. Yeah, here it is, right here.

)P: Richardson.

:F: You probably want to talk with him.

DP: Yeah, I think I do.

:F: Any rate, you can have this.

)P: Thanks. Oh, by the way, I don't really even know officially what your title.

:F: Ranch manager. I also happen to be the vice president of the church. But most of what I do is involved, you know, with physical management, you know, of the ranch and everything we've got here. So, at any rate, I personally have problems with this natural regulation stuff. I don't know if you remember what happened with the buffalo a couple of years ago?

DP: Is that anything similar . . . ?

:F: Well the buffalo herd . . .

)P: It got to big and the severe winter . . . .

EF: . . . and started leaving the Park.

)P: Okay.

:F: This happened about five or six years ago and they started leaving the Park and they came up with all sorts of theories as to why this was happening. And the main theory that was propounded was that the reason the buffalo were leaving the Park is because of the genetic memory they have in their cells of having migrated out of the Park centuries ago into the grasslands of the upper Yellowstone valley. That was the official explanation that was given. I think, that just a lot of bull. I've never heard such a bunch of bull. There leaving because they're over crowded and because they're running out of food. And the proof of that is the last couple winters. The last couple of winters have been light and you haven't seen a buffalo out here. As soon as you get a heavy winter, there's just too much snow on the ground. They're out of here like gangbusters, they're looking for grass, not following some genetic memory that they've got. But that was their explanation, you know. They maintain that Yellowstone is not over grazed, the northern range is not over used, there's plenty of capacity there, you know, they just insist that this is the case. And I don't know of a professional game manager like people from the State Fish and Game Department, I've never talk to one of 'em that agree with that idea, you know. They just, well I was just talking to the head of the Fish and Game Department here over in Bozeman a few days ago and he was scoffing at, you might want to talk to him, his got some pretty . . . .

DP: What's his name?

:F: Leroy Ellig. He's the supervisor, the district supervisor of the Fish, Wildlife, and Parks, up in Bozeman which covers this area. And then the crazy thing that happened was to stop the migrations what they then tried to do was to introduce natural what they called natural aversive conditioning which included recordings of wolf howls being played in the night, and stuff like that to scare the buffalo back into the Park. Didn't work. They also tried to use rubber bullets and what else did they try, flashing lights, stuff like that. Rather than just culling the herd, you know, it's just what they ought to do. I think, my personal opinion is they ought to allow some hunting in the Park, I really think they should. It's the only thing that in the long run that's really going to cull the numbers and to make these so called wild animals really wild.

They really aren't very wild. You've seen 'em. They've no fear of man at all, you know, which I think is unnatural. If you were to talk about what's natural, I think that's about unnatural thing as you could have. Is to have so-called wild animals out there that have no fear of man at all. The reason is because they don't let anybody do any hunting up there. They'll probably take an act of Congress to change that. My personal opinion is it would be appropriate, you know, because it would cull the numbers, it would make the wild animals wild, they'd be weary of human beings, and keep things in balance. I think the state does a pretty good job at keeping things at balance, you know, just by varying the length of the season and the number of hunting permits that they give out and so on. That pretty well keeps, in fact, to tell you the truth, the only thing that keeps these Yellowstone elks numbers in even semblance of balance is the hunting that goes on in the state. You know, there's a awful lot of elk killed out here, you know, around the Park boundaries.

DP: Yeah.

EF: Yeah. And here too.

DP: Something like I don't know, the, has some war type word for it where, some alley? Something like death alley?

EF: The shooting gallery?

DP: Yeah, that's what it was, the shooting gallery.

EF: They don't do that any more. That used to be a deal that went on up above Gardiner where they'd wait for all these elk to come out and then they'd have one day at one particular time and everybody would be able to go down there and shoot. It was called the shooting gallery, and they'd kill, you know, thousands of elk in the course of a day, you know. They stopped doing that, now they have the so called late hunt, which is really a much better version of it. There's certain area here just north of the Park where they issue a certain number of permits. I think it's probably around 1,500 permits all toll, but it's spread out over a three month period, December, January and February. Only so many people can come on a given weekend it's a four day, as I recall, it's a four day weekend hunt. And you've got four days to get your elk, you know, and your permit only includes those four days. If you don't get it, then your out, next weekend, it's new people. It's like a steady stream over a long period of time. And they still harvest probably at least 1,000 elk a year, 1,000 or 1,500 elk a year out of that. But it's a much more orderly, you know, sportsman like way to do it really. It works out pretty good. I think what they ought to do is establish, rather than buffers on the outside of the Park, I think they ought to establish the buffers on the inside of the Park, that's what I really think they ought to do. And they could do an awful lot of game control in that buffer zone, and keep things in balance in there. But they don't believe in any form of intervention at all to keep things in balance, that's their problem. They just think that man should not interfere. The problem is that Yellowstone, there's just no way that the island of Yellowstone can be managed that way, they can inherently get out of balance.

Their ace in the hole at this point is trying to bring the wolves back, you know, but personally I don't think that's going to do anything. I think the wolves are, just like they did in Glacier, they'll leave Yellowstone Park and start killing livestock and deer and stuff like that. They'll go to the easy pickings first, you know, why would a wolf want to take on a big, you know, six or seven hundred pound bull elk when they could kill, you know, male deer out here easier or they could kill

antelope or they could kill peoples livestock without any struggle at all. And why would they want to traipse around in three of four feet snow when they could leave the Park and then come out here and run around here on dry ground? It just doesn't make any sense. They claim that this is what's going to keep everything in balance in the Park. It will only do it if they're able to vastly expand the area that, you know, Yellowstone Park is made up of, that's what I think the real goal is. And that's what I'm totally against.

DP: How have the fires impacted on the church economically, I don't know, or your probably not . . . ?

EF: Well, we have a restaurant out on the highway, you know. And the church business, you know, certainly. Have you seen that?

DP: Yeah, I have and I have heard good reviews of it actually.

EF: Good. Church business from about the first week in August just went way down. So, you know, it hurt us economically there. We did make a little bit from the fires I guess. We got some business from the Forest Service hauling firefighters around on our school buses and stuff. I'd say the worst impact of the fire here for most of the residents here has been the smoke. The smoke has just been, just god awful, really bad, you couldn't . . . .

DP: Well, I've been up here . . .

EF: You've been up here?

DP: . . . off and on, I've been here when its been . . . .

EF: . . . you know, really bad, really bad. We're not accustomed to air like that up here. I've never, to tell you the truth, I've never seen, I've never seen air even as bad as what it is right now today. Prior to this, this would have been a really smoky day for around here. We just don't get that kind of smoke and stuff in the atmosphere, it's very rare, never seen it before.

DP: I've made three trips up here, this is the first one that I've really . . .

EF: Seen any clear air at all.

DP: . . . and I've enjoyed . . . .

EF: That admittedly this is nice comparatively speaking, but this is still rather smoky, I mean, you can even smell a little bit in the air still. We've never even in the, at least in the past seven or eight years, I've never even seen smoke like this unless what we were having during August. Labor Day, were you here Labor Day?

DP: No.

EF: Labor Day was the absolute worst, it was really bad. You couldn't even see the field on the other side of the highway it was so bad.

DP: Has there been a lot, I know most of the firefighters there's been a lot of sore throats and bronchitis especially has there been a lot here?

EF: Yeah. A lot of people with asthma have complained, some left. Some left and just, you know, went home and stayed with their families or whatever for awhile because they couldn't handle it around here it was so bad. People with asthma and respiratory problems one sort or another.

DP: Has it rained ash also here?

EF: Oh yeah, are you kidding. It's rained ash all the way to Billings.

DP: Oh, is that right.

EF: Oh yeah. I was at Billings one day and there was ash coming down all over the place. they were intact, burned pine needles coming down there and they'd land on your car. You'd go and pick them up and they just, you know . . .

P: There gone.

F: . . . there gone, you know, there just dust. Billings has had a lot of ash rain on it. I was over in Billings one day, I drove from Billings to Redlodge in the last week of August and it was so dark from the ash and stuff that was coming out of there that the street lights were on at about two or three o'clock in the afternoon. It was pretty bad. So it hasn't just been here, all the gateway communities, you know, pretty much to the north and to the west has been the worst of it. I mean the north and the east, like from, Bozeman hasn't got it too bad, but from Paradise Valley all the way over to Billings, Redlodge and all the way over there, just really got it bad. There's been plenty of days when the air, the sky was totally clear, but, you know, you couldn't fly an airplane or you couldn't drive a car without having the headlights on, which is pretty rare for this area.

)P: Yeah.

:F: We're not like the Salt Lake Valley. We they get all those inversions. Inversions, as a matter of fact, are pretty rare here because of the wind, the way that the canyons are aligned the wind blows one way or another. So, it's been a bad summer for everybody, you know, as far as that's concerned. About when is your report going to come out do you think?

)P: June 30th is when my final deadline is due.

:F: I see. Are you likely going to want to come back again up here?

)P: Well, I'm not sure.

:F: Any other questions?

)P: Yeah, as I, I'm not, I've just been gathering more than I have been actually assimilating anything. So, my questions right now are pretty uninformed and hopefully at a point I'll . . . .

:F: If I come up with something that I think might be of interest to you where can I send it to? I would because, it's not particularly because I'm vindictive in you know, make life difficult for somebody. But, what I'm saying is that an effort by the Park Service to get the butt out of the fire, you know. They're just saying all sorts of untrue things and trying to avoid issues, trying to white wash over everything in the hope that the whole thing will go away. And I really feel that it's a story that needs to be told, that the truth needs to come out and if anybody is accountable for it then they should accept the accountability or they should be made accountable. I'm not necessarily demanding Barbee's resignation, but if Barbee's to blame then people ought to know it. I don't think they ought to be able to say, well it's all over with now, you just have to make the best of, you know, what we have so. I think that they're just hoping that it will all go away, you know. And the whole controversy will go away and they won't have to worry about it anymore. I think that whether the truth, whatever it is needs to come out, people that are accountable then they should be made accountable.

)P: Yeah. Well I hope I can write an accurate report, it's a lot data with a lot of people involved and I want to be fair an accurate. So, I would appreciate, would you be willing to sign this, this is just a release form, says that I can use it, you can put restrictions on it if you feel the need.

:F: I haven't said anything that I wouldn't mind seeing in print. You might have trouble getting some of these Forest Service guys to sign this.

)P: They look it over a few times.

:F: Yeah, I bet they do.

DP: But, actually that's the reason why I do it for my contract, if, you know, it's just safe to protect yourself and do this.

F: Have you talked to the local Forest Service people down here?

DP: At the Gardiner District? I haven't, no, not yet.

F: You ought to see Mark Petroni there, he's been the acting district ranger, he's been pretty involved with these fires.

DP: I wanted also to talk to the district ranger office at, how do you say it, Hebgen Lake?

F: Hebgen Lake. And I also understand that the people over on the Shoshone Forest were kind of outspoken at least at one point. It burned quite a bit, in fact, the Shoshone's really where it got the worst of the thing. It got the worst burning out on the national forest, at least from the Park fires that moved out.

DP: I haven't been up on the latest updates, but at one point their concern was it was going to burn to the timber sale.

F: I think it did get some of that commercial timber.

DP: I assume that it did get it.

EF: I don't know how bad it got it, but I'm pretty sure that it did get in there. I know a lot of those foresters now want to do quick salvage sales on these burned stands of timber and so on and the environmentalist are starting to argue against it, saying you can't do it until an EIS is done. And the foresters say if we don't do it now it will be to late, you know, when you got burned timber you've got to harvest it right away or it's useless to a saw mill. So that's another controversy that's going to be going on up here.

I just hope when the time comes, if that happens, that they'll go and put them out then and not just say, ah well, let it burn everything, it's not threatening anything now. You know, the stupid thing about it all is that if they'd have jumped on these fires right at the very beginning with everything they had they probably would have spent less than a million dollars on the whole thing. And now, you know, they're looking at over a hundred million dollars on all of this stuff. By the time they really threw everything out the cost was staggering, really incredible.

DP: Yeah, it's a lot of money, that's for sure.

F: Yeah, that's for sure.

P: Thank you, I've enjoyed this.

Interviewee: Marsha Karle, Public Affairs Specialist, Rocky Mountain Region, National Park Service, Denver, Colorado.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 16 December 1988

DP: I want to put a tag on the tape here. I'm in the office Marsha Karle spelled, K A R L E, and its the 16th of December about 11:05 in Denver. Okay, what's your official title here?

MK: My official title here is public affairs specialist for the Rocky Mountain Region. We work with all the parks throughout the region and there are two people in this office, our public affairs officer and myself.

DP: Okay, I'll ask a pretty broad question. What function or in what capacity did the regional public affairs office serve for the fires this summer? And then also, your experiences of working in the Park.

MK: We functioned basically and generally as support for the parks in the region. Kind of as support for the parks as well as between the parks and Washington acting as liaison between the two. So, any times the parks have special activities, special functions, emergency situations, that's where we'll come in to help out. This summer because of the extreme work load in Yellowstone due to the fires, they called and asked if I would come help out. Having been in Yellowstone, knowing the area, it was a natural function for me to fill. My boss who is the public affairs officer here did the liaison work between the Park and Washington and worked from both directions. That's how we fit into the Park this summer. I spent a total of seven weeks in the Park. From late July 'till mid September. And, again, worked in the public affairs office with Joan Anzelmo and Amy Vanderbilt. I was the third media contact person. I was one of those that would do the radio interviews, especially the national newspapers, national radio broadcast and things like that. We had other people that were available to answer how many acres had burned so far, you know, things we could write down and let them take care of without any surprises. I also helped set up a media center there in the Mammoth area when the fires were approaching Mammoth and that area was evacuated.

It was an incredible summer. It was exciting and frightening at the same time. You go through the whole range of feelings about the experience. And looking back on it, at the time there were times when I felt like, oh, this is impossible, nobody in the world can deal with it. But looking back on it I wouldn't have missed it for the world. Most of what we did, and I'm sure you heard this from Joan, included fielding questions from the media about what's happening now, what's the most current information that you can give us, how can I get to where the

flames are, arranging escorts for people, arranging overflights for camera crews. I think, Joan probably has a better estimate, but it seemed like there were thousands of media people around. And they were probably literally hundreds at any one time in the Park throughout the summer. So, an incredible work load was put on the normal public affairs operation there, as well as having the fire information officers scattered throughout the Park at the different Area Commands. And then, I suppose, that you can say that the Mammoth operation also tried to pull a general overview of what was going on in the Park together daily, if not twice a day so that information could all be garnered from one source opposed to having the media contact each of the different areas throughout the Park. And just because of the sheer size of the Park, let alone the size of the fires that were burning, there was an incredible amount of information to gather together each day. It was quite an experience.

DP: What were some of the major frustrations, and also some of the major enjoyments of your experience?

K: Major frustrations were probably trying to get the information and pull it all together in a timely fashion. Everybody wants their morning newscast to have up-to-date information. That was really difficult to do. It was a matter of several people making phone calls to the different areas and pulling together the figures however, those people might not have had the figures available just yet. So, the media would be upset or unhappy because we didn't have figures to give them, that kind of thing.

Another frustration was just the sheer volume of the work load. It was just an incredible work load for everyone. Everyone was working very long hours, seven days a week, no time off, you left family behind or your family might be there but you didn't see them for six days in a row. And I know that both Joan Anzelmo and Amy Vanderbilt made many personal sacrifices. Amy got married in the midst of all the fires in the summer and after she and her husband returned from their honeymoon they didn't see each other for weeks. So, it was a very difficult time personally for a lot of people, just because of the work load and the time they were having to spend in the office. We kept the office open from six in the morning until midnight and you had to have people that were able and available to speak to the media about what was happening. So, I guess, those are probably the two biggest frustrations.

The enjoyment of it was pulling together the Park Service family. Really, Park Service, Forest Service, government agency family, I mean it didn't matter who you worked for. The military were just wonderful, so good to work with. The people that we met and the friends that we made, and long standing friendships that were developed over the summer are really special. And knowing that you can say, in twenty years, well, I was there the summer of '88 when Yellowstone burned. So, it was really, in that way very enjoyable.

DP: Have you done anything that even compares with that in your other public affairs work.

MK: No, I have not personally. It seems like every public affairs person that you would talk to will have something like this in their background where they've experience some sort of an emergency type situation. It doesn't have to be a fire, it can be a flood, it could be a bus turning over. Everyone has experienced something like that and so this can be mine for my career. Hopefully it won't happen again.

DP: You mentioned this in your frustrations but tell me some more about communication problems. Because it seems like that would have been a terrible struggle with . . . ?

MK: It was. It was. So much of it occurred because of the isolated areas that we were dealing with. At one time, when the fires were at the Old Faithful area during the big fire storm, we lost telephone communications with the area. We didn't know what was going on, we didn't know if everybody got out. It was a very, very, frustrating time. That is just one of many examples of the times when people were only available by radio. And you'd have to call them on the radio and have them call you back, you know, when they got near a phone and those kind of things. During emergency status, we didn't even have access to radios. And again, I think, it was more because of the size of the area of Yellowstone and because there was so much going on it was just real hard to keep in touch with all the different areas.

DP: You hear a few stories of the press either taking active role in a intense situation in the actual fire suppression, do you know any of those stories.

MK: I don't know of anything first hand, no, I had heard stories like that. We also had some problem with media going into unauthorized areas without an escort. Not terribly often, because I think, most of the media folks really did try to cooperate. We made sure that they were dressed appropriately. But, they'd come in totally unprepared in tennis shoes and shorts. And, of course we couldn't let them on the lines dressed like that. That was somewhat of a problem. As far as trying to get the media to report accurate information, there were one or two channels and specific people who just were out for any story. They would grab anything and anyone put them in front of the camera. So, that was a real problem. It was a frustration through the summer. But otherwise as far as individual things that happened, I don't know of anything personally.

DP: Well, that brings up another questions is of rumors. Share how those were started and how that impacted on your efforts.

MK: Right. The rumors were a tough thing to fight because we would get calls from all sorts of people, from media, or from our own employees saying, I heard such and such is happening, I heard that Grant Village is burning up, or whatever. And we would have to try to find out, okay, who am I talking to first of all and where did you get your information. And then pursue that, find out if that was really happening or not. And many times, we were really caught in the middle on those kind of things because we didn't have a way of finding out quickly if it was true or not. So, we had to really watch, especially the inexperienced people that were working in the office and hadn't worked in public affairs before. What kind of information they would hear and that they would give out. That was something that had to be constantly watched.

DP: I'll give you an open ended question and anything that impression you, or anything that you would like to share about the summers event.

MK: Yes, a couple of things that really impressed me. The devotion of the people that were working on the fires. The dedication and the willingness to work all hours of day, night, it didn't matter they were always ready. They'd be tired, they'd be frustrated, but they were right there when you needed them. And I'd say across the board as far as Forest Service, Park Service, BLM, it didn't matter what agency, I felt that the cooperation that I personally received and I think that I can probably speak for the public affairs office as a whole in that everyone really did

try to help. Area Command was very responsive. We'd have totally off the wall questions that we'd need answers for and they would get answers for us in no time at all, or at least steer us in the right direction. As far as the people that actually worked at Mammoth in the command center there, they were terrific. Many were people that I had known in the past, but you don't know a person really well unless you've worked with them twenty-four hours a day for seven days a week. And I was really impressed by the people and their individual devotion and responsiveness to what was happening.

The other thing that impressed me a lot was the superintendent's stamina and positive attitude throughout the summer and into the fall. It was incredible that he withstood all the criticism, all the political pressures throughout the summer and continues to have to fight that sort of thing. But he has, I don't know of any other person that could have done it. It's just an incredible accomplishment to survive the summer and still smile. It was tough, it was really tough on him at times as well as on his family. Your personal life if really affected by something like that. Those are the two main things that really did impress me a lot.

nterviewee: Lorraine Mintzmyer, Director, Rocky Mountain Region, National Park Service, Denver, Colorado.

nterviewer: David W. Peterson

ubject: 1988 Greater Yellowstone Area Fires

ate: 16 December 1988

DP: I always put a little tag on the tape here and say that it's December the 16th, is that right? I was a day off earlier this week and usually that carries through to the end of the week. And I'm here in the office of Lorraine Mintzmyer, did I pronounce that right?

LM: That's correct.

DP: And, here in Denver, and it's about 10 A.M. in the morning. Okay, first off, give me your view of the public reaction and how, and what sort of reaction, impacted directly on this office.

LM: Well, in other words, you mean, what our involvement was?

DP: Yeah.

LM: Okay. Well, as the regional office for a six state area, in which Yellowstone is, and Grand Teton are part of those forty-one areas that I'm responsible for, it's a direct line from the director to me and then to the field area, so that's how we operate. So, the overview-evaluation function is essentially my role as a regional director. I am not the individual that should be or can be involved in the day to day line operational decisions. That's why, for instance, in a Park the size of Yellowstone or Grand Teton which are major park areas, have a highly graded staff to function almost independently, in most aspects. My role with Yellowstone or Grand Teton is one of consultation, it's one of advice, counsel, support. I'm the intermediate level to the Washington office, if there's, and I'm also responsible for insuring the policies carried out in accordance with National Policy. So, the role is not so much in the public arena as is the line officer that's on the firing line. So, when issues come to the forefront, the superintendent and I consult. In fact, they were many days when there would be several calls between the superintendents and me about what was occurring. Regional involvement from a public information process was not as intensive, because we had so many national media right on site this year. In situations where you don't have such a long extended event, we would perhaps have more involvement from a public relation-stand point, because of the fact that people would not be sending so many reporters and so many media representatives to the site location. But, nonetheless, there were media calls, and our public affairs officer had to be involved and informed and helpful in terms of transferring information to the public. So, it was a little bit different situation this summer than in ordinary circumstances. Also, the length of it led to different sequence of events. Normally, when you have an event of this size like a hurricane or an earthquake or so forth, it's over in one or two days. Then you get on

with cleaning it up and going on. But, this was such a extended period, so it's a little bit different than is the normal event.

P: Did it, as far as the national and the local scene went, there was a lot of political pressure put on both the superintendents and also the Park Service director. Did any of that pressure get focused at the regional level?

M: There was some, but it was not nearly so intensive as it was at the other levels, at the park and Washington level. And of course, at the Washington level it came about as a result of the "called for resignation of the director by the Wyoming delegation".

DP: Okay. Tell me about the role of the GYCC in general terms, maybe some of its background, etc, etc. And then comment on it's functioning during this year's fire. And just the general coordination between the Park Service and the Forest Service.

LM: Well, of course, as you probably know the GYCC was an evolution of interagency cooperation that has been in existence for many years. But, it came to, shall we say, more concentrated basis as a result of the hearings on the Yellowstone area. That took place in front of the Congress. There were pressures to see if there weren't some way that we could deal with better overall management of a large geographic area in the interest of the resources and coming together as managing agencies to try to deal with things, irrespective of boundary lines. We are all dealing with similar laws and we, of course, have different missions. Nonetheless, there are a lot of things that are quite similar in our operations. So, the aggregation plan was the first step in trying to get a hold of number one, what things where the same. Number two, what things where different. And then number three, to lay out a plan of how we are going to coordinate and consolidate that management on a very large basis. And it is in fact, to my knowledge, the first major interagency management that has really occurred in this country on this scale. There might have been smaller issue oriented coordinations, but not on the basis that everything is going to go through this kind of process to see how we get on with our missions jointly.

So, I think the regional foresters and I would say that we have been, and probably will continue for awhile, feel our way a little bit, because it hasn't been done before. We're carving new ground and so, we're writing the book, so to speak. Had the circumstances been ideal, we would have had procedures, guide lines, and mechanisms set up, and would have gone through this cooperation and coordination on lesser kinds of complex issues, so we could have tested those procedures and those methods. Unfortunately, we were not given the advantage of that. We were plunged into something the likes of which hasn't happened before in the history of the national park system on this scale. And I don't believe probably some on an area basis in the Forest Service either, although, they have many fires in other locations. But, to have something that's this massive, and this concentrated in area, is somewhat of a new thing.

So, when there wasn't the opportunity to develop mechanisms, procedures in an orderly fashion, it plunged us into trying to make those decisions and set up those procedures in a reactive mode, rather than in a proactive mode. So, it was more of a reacting to what the circumstances were at that particular point in time, because there just wasn't any way to drop everything else that we all were responsible for and all of a sudden say, "Because this fire is occurring, we're going to abdicate all the rest of our responsibilities and just concentrate on how we can get on

with dealing with just this particular issue." And in the ideal world that would have been nice, but that isn't the way it works. The regional foresters have a lot of other responsibilities as do I. Even though I have responsibility for Yellowstone, and Grand Teton, nonetheless, I have responsibility for another thirty-nine areas and issues and things keep going on in those as well. The clock, the world doesn't stop just because you're having something happening. So, when it became apparent in conversations with the superintendent of Yellowstone that we were not dealing effectively with overall fire coordination, where, in fact, there were different answers coming from different forests and back and forth in those dialogues about the way the policies where being implemented and the way resources where being allocated, it became apparent that there was a need for a more coordinated approach if we were really going to hopefully get control of the situation. So, that's what activated the call by me to Gary Cargill, asking for the institution of an Area Command system. I do not recall what day it was. I would have to go back in my notes. I called him on Friday morning. He did move to that system and that's how it came about.

DP: So, the Park Service was the one that took kind of the initial lead on establishing . . . ?

LM: Not necessarily saying that we took the lead in the establishment of the Area Command, but we took the lead in recognition that something needed to be done. Now how it was effected was something else.

DP: Generally, overall, I suppose that you're best prepared to give the answer on a regional level, but, maybe, tell me what you feel like you know well enough to comment on the whole grass roots level, but then, also the regional level, how was the cooperation between the agencies?

LM: You have to understand, that it is from a more distant perspective. I think when the situation demanded the people rose to the occasion. I think that what it proved to me and perhaps to my counterparts, too, I wouldn't pretend to speak for them, but when we get into something like this that is of a such a comprehensive basis and you have such large number of line officials involved and who are the day to day deciding officials, we will have to dedicate ourselves more religiously to some kind of mechanisms so we can communicate almost daily to perform our role as the Greater Yellowstone Coordinating Committee. With Gary Cargill representing the Forest Service, and me representing the National Park Service as co-chairs, we need to be in a position to be able to immediately confer, consult, be briefed, and then make decisions. Also on how we can deal with resources or how we recommend to deal with resources. An ideal situation would be if there could be some kind of delegation from the other regional foresters to whoever the Forest Service would designate so there would only be two of us to have to consult and get together. It's a horrendous process to try and get four of us together on an emergency basis. Because we're all very much involved in other things. I think you probably know that from your experience. Just the sheer logistics of trying to even arrange a conference call sometimes gets to be a real zoo. So, I would like to see that happen, but I don't know that it will.

DP: How, of course, I'll talk at greater lengths and detail with your public affairs people on this. How do you think, where do you think some of the confusion stemmed from as far as the press not totally, and people in the national at large really understanding the niceties of a prescribed fire management plan?

LM: I think that anybody who is arrogant enough to think that they can spoon feed and control the press are kidding themselves. As a public official, you have to deal with the fact that press are individuals just as we are. They have their jobs to do. They have their own agendas. They have their own opinions. It's a two edge sword that public officials just have to deal with. The freedom of the press is something that is of such a value that there's no way that I would ever pretend to say that I would want, or could, control their output. All we can do when something like this happens is to try to do as good as job as we can humanly do. Frankly, its my experience it's never enough. We don't have one person to give to every reporter that shows up, it's just not possible. Our manpower's just not that available to take care of things in that scenario. So, when you have thousands of people on something, there's always going to be frustrations, there's always going to be in the heat of the day people expressing themselves perhaps in a way that vents their emotions, which is absolutely natural. It's very hard to think through absolutely everything you say so it won't be taken out of context, because it will be. You can just predict that it's going to happen. So, I believe that with the resources that we had, we did as good a job as we could.

DP: Once again, I realize that you're kind of at a middle level, you're not on the actual unit, and your not at Washington, but that will give you perspective, maybe, from the middle of both ends. Tell me a little bit about how both the public interest, the political interest, and also, the media interests effected morale on the different levels?

LM: Well, I think, the people in the field felt pretty bedraggled and berated at certain times by the fact that they did see some things that were put into the newspapers that made it appear that they were not doing their jobs or something like that. That's tough to take when you're the person that's out there dealing with things, day after day, twenty-four hours a day. And over such an extended period of time. And I harkened back to my comment before, it's one thing to keep the adrenalin going for maybe a two or three day event. It's another, to keep the adrenalin going in that kind of context for months on end. It's exhausting, it's depleting of your own personal resources and your ability to cope. What I felt was part of my role and what I certainly did, when I went to the Park to review the fires, was to be in a reinforcing situation with them to make them realize that their efforts where being recognized. I asked them to not respond to what was being said in the press, that that was one days report and they would be judged in the long term over the whole time, and what the end result was. I wanted them to feel that they were being supported and that their efforts were being understood, appreciated. They certainly did not need anybody kicking them in the pants. They needed a pat on the back to keep up with this kind of a process over that long period of time. So, that's what I saw as a major role of mine. And I did do that, quite consistently.

The politics of the situation, of course, are daily things that I live with in my job. It's just part of the scenario. And so, I was not surprised at the vehemence of the political influences. National parks by virtue of their size, their economic impact, their constituencies which are international and national in scope, attract that kind of interest. I think, perhaps there are some people who don't understand that, but they certainly do when they get to my level. Even the smallest thing can be, and especially anything involved in the Park like a Yellowstone which is

the first national park in the history of the world. It is the precursor of what's done throughout the world in terms of Parks. And so, it's looked upon as being not only a national treasure, but an international treasure. And so you just know that everything you do in that Yellowstone National Park, and incidently Grand Teton as well, is going to be front page regardless of where it's done. And for every view in one direction, you're going to have a view in the other. So, the role of a manager in a national park system at our level is essentially to be the balancing factor between the two very, very, divergent opinions about how national parks should be administered.

So, I just consider politics to be part of the job, and so does the superintendent of Yellowstone. We always have to look at things with that in mind. That does not mean that we do not make recommendations on a professional level, we do. But, we also have to factor that into our decision making process. It's the difference between a major kind of a professional role and the first step on the ladder.

)P: Still within the political realm is the executive end of it. Talk a little bit about the role of Secretary Hodel and Lyng.

.M: Lyng.

)P: Lyng. In the summer fire event.

.M: I thought that they were very responsive. Secretary Hodel was, early on, was very much interested and concerned and had, long before the presidential mission occurred, set up an organization so that every morning in his office he was briefed on what was going on. He came to Yellowstone early on to see for himself what was occurring as far as implementation policy for which he is responsible. I was very, very pleased with his involvement, with his concern, with his understanding of what was occurring, and his concern for the people that were involved in it. And, of course, I was only exposed to Secretary Lyng once which was when the secretarial mission occurred. But, he was there because he was concerned as well. When the presidential mission occurred that was the Secretary Hodel's second visit to the fire. I thought he had a very balanced approach in terms of addressing it. And he did not respond to just the "political heat." He was responding in terms of not only that, but also what was good for the national park areas under his jurisdiction and also for the concern for what's good in the overall long run in terms of the policy.

)P: Comment on what you see as positive aspects, maybe such as, attention focused on wilderness values, or etc. Some of the positive aspects that you see coming out of this?

.M: Well, I think it's going to lead to better communication and better coordination. And, frankly, better implementation of the fire management policies in both of our agencies. It will be the same policy for the Bureau of Land Management and Bureau of Indian Affairs as well. But, I think, there will be a new awareness of what mankind can do and what they can't about such natural events. I think some people feel there isn't anything that if you have all these resources that you can't conquer. I believe that there was an awareness this summer that there are some things that there aren't enough resources in the world to deal with. And, we recognize, I think, that we are part of a whole when you have major areas of the whole West that were in jeopardy as far as the fire was concerned. It was amazing to me that while homes were burning in other parts of the West, still there seemed to be concentration upon the Yellowstone area. I believe that there will be a better understanding after we go through the

public hearings of what the wilderness policies are. I think there will be more and better consistent interpretation of it because there have been differences in the interpretation of wilderness policies. I think it will help the country as a whole make some basic decisions about where this country's limited resources are going to go. With a recommendation for more prescribed burns, there is a cost involved in that, as well as there is a cost involved in fighting fires. They will force the decision up front as to whether or not the public and the Congress and the executive branch are going to say now this is what we recommend and these are the resources by which you are going to carry it out. It's almost a case of pay me now or pay me later.

[TAPE INTERRUPTED]

LM: When a country is in the throes of dealing with such a large deficit, it will be a real revelation whether or not we do receive the resources to carry out presuppression.

DP: In talking with Jack Stark, I can't remember how long he'd been with the Park Service. But, he said the only thing that compared to this, may be compared, he wasn't sure, where it ranked in his mind with the amount of national attention being focused on an issue related to the Park Service was perhaps the Statue of Liberty campaign. How long have you been with the Park Service and talk about events that have focused national attention on the Park Service and kind of compare it to this year.

LM: I've been in the National Park Service for some twenty-nine years. And, there has been no other event, that I can recall, that I have been so personally associated with that has had this kind of intensity over such a protracted time. I've dealt with storms in my career. I've dealt with major law enforcement events. For instance, when you've had occupation of some of the national shrines in this country by groups who have taken them over to make an issue, to make a statement. But, even then they were not of such an extensive time. This has been the most extensive of any time in my career.

DP: Just in closing, is there anything you'd like to say for the historical record that we haven't covered? Just in open end question. Something that impressed you about?

LM: I guess the thing that impressed me most about going through this, and of course, we still are, is that the first phase of this event is through. Now we're in, maybe, the second or third phases. And, what has pleased me so much is to see the dedication, the professionalism of most of the time of the people that are involved in it. I've always known that there was a real dedication on the part of most public servants to their jobs or they wouldn't be in them because it certainly is not in the salaries they get. But, what impressed upon me was that the fact that it didn't seem like there was any questioning of the fact any time by any individual. When the time came for it, that they were willing to pay the price regardless of what it meant in terms of their personal life, their own personal physical and mental resources. I just am very proud of that. I was also impressed by the professionalism and the capability that was evident in all of the people, in all of the levels, of all the agencies, in the firefighters, and so on and so forth. It reaffirmed my faith that have a lot of good people in this world who are dedicated to an ideal. And very frankly, it also reaffirmed my faith that there are people in this country who really care about their national resources enough to come and find out what's happening; enough to express their

concern for them. And I think, that concern and that press interest and so on and so forth was a positive rather than a negative.

DP: Your answer there sparked another question. Tell me about the review process. What agencies are carrying on reviews? What's their purpose?

LM: The policy reviews?

DP: Huh, huh.

LM: Well, it's a joint committee, comprised of people, largely from the Forest Service and Park Service because of the nature of what occurred this summer. But, there are representatives on that committee from the other agencies, like Bureau of Land Management, Bureau of Indian Affairs, Bureau of Fish and Wildlife Service. And that policy review has been ongoing, of course. The recommendations were presented to the press yesterday, in a press conference. Actually the reports were delivered to the two secretaries, as what the intent of the press conference was. And now, those recommendations, those findings, will be out for public comment and also agency comments. It was an intense kind of review. It was done with people who are very much professionals. And, I think they did look at things from a very objective stand point. They were appointed because they were people who were experienced, but also, were outside the spectrum of the circumstances this summer, so they could look at things in an objective fashion. I'm looking forward to seeing what the comments are.

DP: Well, thank you, I appreciate this.

LM: Well, it's nice to meet you.

DP: Yeah.

LM: Are you enjoying your project?

DP: I am.

Interviewee: Del Mitchell, Area Command Plans Chief

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 24 August 1988

Transcript Edited and Rewritten by: Del Mitchell, April 4, 1989.

I have been assigned to the Greater Yellowstone Area Command since July 26. Since August 11, I have served in the capacity of Planning Coordinator. From a personal perspective, I feel that the fire activity that occurred on August 20 marks the most significant influencing event within the Greater Yellowstone Area. To date, I'm convinced that the events of this day are historic in terms of fire behavior. The results of this day caused us to realize that we were no longer in control. We are now at the mercy of ensuing weather conditions with wind being our greatest enemy. Up to Saturday, August 20, fires within the Greater Yellowstone Area were considered manageable and it was conceivable that they would soon be brought under control. Suppression activities were winding down and many of the fires had been turned back to Park officials. Several of the fires, although large in terms of fire perimeter, posed a minimal threat from the standpoint of visible active fire.

AUGUST 20, 1988 - A MOST MEMORABLE DAY

To visually display the significance of what transpired on August 20, I had a map made comparing fire perimeters before and after the events of this day. Utilizing perimeter data from both infrared photo flights and ground intelligence, our records of August 19, disclosed approximately 323,619 acres of total burned over area within the Greater Yellowstone Area. In contrast, using the same sources of available information, on August 21, the total acreage of fire had grown to an estimated 480,215 acres. This represents over a 35 percent increase for existing fires with the largest gains being on the Clover-Mist, Storm Creek, Hellroaring, and North Fork fires. In addition, two new starts, the Huck and Hunter fires, located south of the Park, are of significant size.

The magnitude of this unprecedented situation, in terms of active fire perimeter and potential threat to life and property both in and adjacent to the Park, intensified the level of interest. It is now perceived to be of national significance from both a political involvement aspect and competition for firefighting resources in the form of people and aircraft. This situation culminated with the decision to activate and deploy the regular Army.

To understand what took place on August 20, it is necessary to examine the preceding weather conditions and its aggregated outcome in terms of observed fire behavior. For the past six weeks the prevailing wind has been out of the southwest. All of the burn patterns that we have plotted on maps readily

reflect this. The North Fork fire is a prime example as its forward movement has been consistently in a northeasterly direction. The same pattern is visually evident on the Snake Complex and most recently on the Huck and Hunter fires. Wind velocities of 15 to 20 miles per hour have been common during the afternoons. In addition, we have frequently experienced gusts of 35 miles per hour.

A condition that has progressively worsened, due to the persistent hot dry weather, is the amount of moisture present in the fuels. Of particular concern is the larger dead material resulting from the insect epidemic several years ago in lodgepole pine. The amount of moisture absorbed and retained in this material determines its flammability and how well it will burn. The drying effect from high temperatures and wind depletes this moisture content. This condition can only be reversed by a drastic change in the weather over a considerable length of time. The last measurable precipitation recorded at Area Command was on August 14 when we received two-hundredths of an inch of rain which quickly evaporated. On August 20, fuel moisture readings at the weather station in Mammoth (Yellowstone Park Headquarters) were 2 percent. For comparison purposes, Kiln dried lumber contains approximately 8 to 9 percent moisture. In short, the 2 percent fuel moisture reading means there isn't any moisture in the forest fuels. This is evident in what we're seeing in the form of spot fires ahead of the main fires. Dead material readily ignites and advances the fire at an accelerated rate. To illustrate this in terms people can easily understand would be the ability to start a campfire without the use of kindling--just holding the match to a block of wood.

Another factor that has adversely influenced fire behavior in our situation is the persistently low relative humidity. On August 20, the lowest relative humidity was measured at 7 percent. This means that very little moisture is in the air and fire burns uninhibited. Of greatest concern however, is the lack of humidity recovery during the nighttime hours. Generally, at high elevations, characteristic of the Park, and considering the time of year, one would expect cooler temperatures and higher relative humidities at night. This rise in nighttime humidity is termed humidity recovery and as it increases, fire burns with less intensity. Normally for this time of year, the Park should be experiencing a humidity recovery ranging between 40 to 60 percent. The nights should be cool and require the use of a warm jacket. Contrary to this, we've had measurements of 19 percent relative humidity on high ridges at one o'clock in the morning. This means that fires burn just as active at night as they do during the day giving little edge to the firefighter.

When you combine all the factors of unrelenting wind, extremely low fuel moisture, and unseasonably low relative humidity over a considerable period of time, you are sitting on a time-bomb waiting to explode.

Toward the end of July, Area Command made a decision to put together a team of fire behavior specialists to assess the situation in Yellowstone and project what was likely to happen. This team, under the leadership of Dick Rothermel, was given a few short days to complete this assigned task. The findings and predicted outcome of this team was presented to agency administrators and Area Command officials on August 2. The team felt that the final outcome of the fires were basically predictable. The unknown factor centered around the direction and velocity of the wind. They concluded, considering the time of year, that we could anticipate, at most, the probability of having one major wind event. A major wind event was defined as experiencing a sustained velocity in excess of 40 miles per hour over a

duration of a few hours. Ironically, we experienced a major wind event on August 6.

The second and most monumental major wind event occurred on August 20. Sustained winds of 50 miles an hour were common on most fires in the Greater Yellowstone Area. We had three unofficial readings, utilizing hand-held instruments of velocities exceeding 70 miles per hour. These measurements were taken on the North Fork, Clover-Mist, and Hellroaring fires. The effect of this wind on the fires was more than most of us in the fire business could fathom particularly in this fuel type. The largest gain in terms of acres was seen on the Clover-Mist fire as it burned an additional 50,000 acres to the north in the direction of Cooke City. The intensity of the fire is evidenced by the total consumption of fuel. The burned-over area is totally blackened and the wind drove the fire right into the high elevation rocks above timberline consuming all burnable material. Form a standpoint of fire control, this is beneficial in that mop-up needs are minimized and the risk of a re-burn eliminated.

The Hellroaring fire, located north of the Park, made a significant run during this time burning an estimated 25,000 acres in a few short hours. Those of us who had an opportunity to fly over this drainage before and after the events of August 20 were awestruck by the contrast! This pristine drainage, intermixed with meadows and wallows, had the reputation of being an elk hunters paradise. The wind-driven fire moved through the main Hellroaring Creek drainage so fast that the small lateral drainages were cut-off, as if by a knife, in a straight line. I shudder to think of what the consequences could have been if we would have had a fire camp established in the path of that fire-storm.

The Storm Creek fire, located north of the Park on the Custer National Forest, gained an estimated 18,500 acres on August 20. This activity of this fire was unique from the others as it made a major run in a southerly direction toward Cooke City. Initially, it was felt that this may have been influenced by the heat and energy produced by the Clover-Mist fire located south of Cooke City. A subsequent on-the-ground assessment; however, by fire scientists, Rod Norum and Dick Rothermel, refuted the possibility of this claim. They attributed the burn direction of the Storm Creek fire to existing local winds associated with high elevation and terrain features.

High winds causing electrical transmission lines to be downed were responsible for starting two new fires south of the Park. These were named the Huck and Hunter fires. The Huck fire started near the Flagg Ranch and reportedly traveled four miles in just 45 minutes. This in indicative of the extreme force wind has on fire.

Some of the other fires may have made equally spectacular runs but were not visually observed or photographed on August 21. Due to the vast amount of fire perimeter now involved, and our limited physical ability to achieve only about 25 percent of desired infrared coverage in any one night, our acreage computations are subject to revision.

A CHANGE IN STRATEGY

Another subject that needs further explanation is the applied suppression strategy and how it changed over time as burning conditions magnified. Initially, fires burned in a spotty fashion that created a mosaic pattern of burned and unburned islands. Blackened area was estimated to approximate 40 percent of the total area within designated fire perimeters. This erratic burn pattern and general lack of fire intensity, in terms of an advancing fire

front, was instrumental in the decision by administrators and fire managers to employ "light-on-the-land" tactics. Basically this involved containing the fire by restricting the construction of handline to areas between natural barriers such as; open grassy meadows, rocky areas, cliffs, and streams. Both constructed and unconstructed containment lines were reinforced with the use of water to extinguish threatening hot-spots. The Fan fire serves as a good example where this tactic was employed. Initially, a majority of fireline around this fire consisted of either a narrow handline or use of natural barriers. For the first couple of weeks this tactic was effective in that the overall fire perimeter remained basically unchanged. However, with the perpetual drying condition, fires begin to rekindle within the perimeter and consume patches of unburned fuel initially passed over. The intensity of heat associated with this reburning caused spotting to occur across the original containment line. With active fire now outside the line, it was necessary to reassess the situation and consequently change suppression tactics. This required starting over and completely constructing a handline around the entire 23,000 acres of the Fan fire. Effective handline construction now consisted of establishing a secure anchor point and flanking the fire by physically building a line next to the fire edge. helicopters were used to drop water as a cooling action where fires burned hot and threatened to abut against the fireline. For a three day period, on the Fan fire, this necessitated dropping up to 200,000 gallons of water each day. In order to hold this newly constructed line by eliminating the risk of spotting, it is necessary to follow-up with a thorough mop-up operation for a distance of up to 600 feet inside the line.

This continual reburning action that is occurring within existing fire perimeters is drastically altering the overall effect on the area. Initially, the fire behavior and resultant mosaic burn pattern was considered desirable. However, with the unburned acres now being consumed, there is a high probability we could eventually end-up with a monoculture type condition.

The management strategy applied to all new starts, at least during the month of August, has been one of taking fast, aggressive control action. A good example of this was the Cub fire which had the potential of closing the access road to the Park's east entrance. This lightning caused fire was hit hard and still burned 50 acres. On August 11, three lightning fires were detected and quickly suppressed. These include the Peel, Forest, and Boundary fires.

The Madison fire, located a few miles northeast of the town of West Yellowstone, started on August 14, from a holdover lightning strike. This fire was detected by an air-attack pilot working on the North Fork fire. Immediately upon report, retardant planes were dispatched from the nearby West Yellowstone Airport. Ten loads of retardant, totalling 22,000 gallons were dropped. In addition, six smoke-jumpers from the base at West Yellowstone and a Strike Team (minimum of 35 firefighters) from the North Fork fire were dispatched to fight this fire. As if in defiance of man's intervention, the fire still burned 15 acres.

THE OMINOUS NORTH FORK FIRE

Much criticism has shadowed the North Fork fire since the day it started. This man-caused fire started on the afternoon of July 22, just west of the Park boundary, on the Targhee National Forest. Initial suppression action taken by the Targhee National forest included the use of bulldozers due to the prevailing wind direction, however, the fire quickly burned into the Park. The decision was made by Park officials to preclude the use of dozers in the Park.

This decision has since generated considerable debate. Advocates of using dozers base their argument on the fact this fire was man-caused and every effort should have been made to control it regardless of Park management policy. This includes the unrestricted use of dozers in the Park. A review of the chronological growth of this fire; however, interjects uncertainty as to the probability of success had dozers been allowed to pursue and attempt to flank this fire. I base this on two facts: First, after the second day, the size of this fire was estimated to be 3,100 acres which indicates burning conditions were favorable for advancing a fire; and secondly, much of the terrain in which this fire was burning was not suitable for dozer operation which implicates serious safety considerations. Personally, I don't feel this fire, considering the existing burning conditions, could have been confined by a fireline within the first two or three days. When the fire prediction team assessed the North Fork fire in an attempt to plot its probable path and final size, they expressed a concern for this fire advancing in two directions. The main thrust, due to wind influence, would be in a northeasterly direction and because of fuel types, an advance could be expected to the east. An eastward advance was of utmost concern as this posed a potential threat to the development at Old Faithful. These buildings, because of their number, wood construction, and age would be difficult to protect. The amount of surface exposure connected with the historic Old Faithful Lodge alone makes it very vulnerable. Needless-to-say, considerable effort has been expended over the past three weeks keeping the fire from burning in this direction. However, because of the reburning that is occurring within containment lines and the constant threat of spot fires, this battle is being fought daily. Consequently, approximately 500 firefighters a day are committed to this endeavor alone.

After the North Fork fire had been burning for a couple of weeks or so, it became apparent that it was going to burn into an area of concentrated dead, down fuel estimated to be about 1,000 acres in size. The assigned Fire Team determined that the consequence of having the advancing fire burn into this fuel pocket would be devastating in terms of increased fire energy and intensity. This would in turn, seriously jeopardize the objective of stopping the fire at the Madison River. To abate this situation, the decision was made to ignite this fuel pocket, using a helitorch, under the favorable weather conditions, and allow it to burn out ahead of the advancing fire. From a tactical point of view, this was a good decision. Unfortunately, the day following ignition we experienced an unpredicted major wind event with winds in excess of 40 miles per hour. This strong wind fanning the flames from this burn-out developed a new fire front that quickly advanced to and across the Madison River. considering what has since taken place, I feel it was inevitable that the North Fork fire would eventually burn across the Madison River. The decision to burn-out only hastened the time table by two to three days. On August 20, the North Fork fire expanded by an estimated 15,000 acres. Infrared photos taken of this fire during the early morning hours of August 21 clearly display the effect of strong winds. The head of the fire consisted of numerous fingers of up to five miles in length with active fire spaced along these fingers. Gaps of one-half mile or more existed between the areas of active fire. A graphic illustration of this effect would be similar to taking a flat rock and skipping it across a body of water.

The North Fork fire has advanced, on the average, about a mile per day. On days of high wind, like August 6 and 20, the advancement had been measured at 4 to 5 miles. A majority of the advancement comes in the form of spot fires which ignite up to a mile ahead of the main fire thus producing a new fire

front. Any fire that advances due to spotting and burns with the intensities we have encountered cannot be fought on-the-ground utilizing a frontal attack. The risk of entrapment is too high. With the current situation, the only suppression tactic that can be effectively applied, considering the magnitude of area involved and persistent burning conditions, is one of a flanking action supported by intensive mop-up activities. Application of this tactic for constructing and holding fireline involved a long slow process. If crews can achieve a mile or mile and half each day and hold it, on any one fire, they are doing good. At this rate, we are lucky to hold even on good days not to mention what happens on windy days. This is understandably disheartening to firefighters who have been in some cases, involved with this for month or more. In short, we need a break in the weather. We are hopeful, considering the time of year, that the weather will change at least for a short duration. It is critical that we have resources positioned and ready to take full advantage of this break when it does occur.

On August 18, a meeting was held with concerned residents of West Yellowstone. A wide range of concerns were expressed, but basically they were upset at the prolonged effect the North Fork fire was having on their overall economy and lifestyle. The North Fork fire, visible to the residents of West Yellowstone, has been burning for almost a month. Although the fire front is not burning directly toward the town, the west flank has been advancing with the action of a backing fire at the rate of about one-tenth of a mile per day. This backing fire had been burning on a plateau and only the smoke could be observed from town. However, last week the fire broke off of this plateau and an orange glow was clearly visible from town during nighttime hours. Needless-to-say, this crated a high level of anxiety among residents as they envisioned a genuine threat to their lives and property. We attempted to assure them that the fire was still 8 to 9 miles away and they were not in any immediate danger. Their perception; however, was that this fire could have been put out at the onset and they were tired of it and wanted it brought under control. The local Forest Service district ranger, Ralph Meyer, pointed out that because of the prevailing wind pattern, the citizens of West Yellowstone should be concerned about the possibility of a fire starting west or southwest of the town. He disclosed the fact that district crews have been patrolling this area from seven o'clock in the morning until eleven o'clock at night. Within a eighteen day period, these crews found and extinguished twenty-seven fires that were results of campers, drinking parties, and careless smokers. He insinuated, that to a degree, the residents of West Yellowstone controlled their own destiny. He solicited their support in being careful with fire and making others aware of this impending danger.

As an added precaution and means of demonstrating our concern for protecting life and property in West Yellowstone a joint effort was initiated this morning, August 24, to conduct fuel modification work adjacent to the town. Included in this effort are employees from the local Forest Service, personnel from the North Fork fire, with support vehicles and machinery supplied by the Park Service, and local contractors. Fuel modification consists of the removal of any combustible material within the parameters of a designated fuelbreak. Its purpose would serve to slow down an advancing fire and give firefighters a chance to stop it. Local radio and television stations have been very accommodating toward this effort by making their listeners and viewers aware of what is being done and why. Hopefully, this will help establish some favorable relations between the community and Area Command.

Interviewee: Joe Peterson, Class II Crew Member.

Interviewer: David W. Peterson.

Subject: 1988 Greater Yellowstone Area Fires.

Date: 11 March 1989.

DP: Ok, I am here in front of Joseph Peterson's house, here in Bloomington Hills, near St. George, Utah. And, what's the date to day, Joe?

JP: March 11th.

DP: March 11th and it's in the afternoon. Ok, first off, why don't you tell what kind of crew you are normally stationed on and what sort of work you do there.

JP: Normally I am on an engine crew. We are on a light engine. It is a essentially a one-ton pickup truck that has the capacity of 250 gallons. We are stationed on the Arizona Strip, Mount Trumbell, a fire station there. And I have spent--this is two seasons now--working on an engine crew and have not, before my experience in Yellowstone, been on a hand crew.

DP: So what agency are you associated with? Are you with a Forest Service crew, or a BLM crew?

JP: BLM crew. And we're with the Arizona Strip district

DP: Ok. Why don't you talk about the process that got you called up to Yellowstone and what you did.

JP: Ok. There is an interagency association composed of firefighting groups in southern Utah called the Color Country, Color Country Organization. I'm not sure what you call it. The Color Country Crew is what we were called. And what happens is, when there are big incidents that require hand crews and a lot of resources, firefighters are called off of various agencies in southern Utah and are put on a single crew. Now our crew was called together on the, it seemed like it was on a Monday, which would have been, as you say, the 8th of August. There were two people that came from the Arizona Strip: myself and another person named Dennis Derrick. We were off of engine crews, and we never had been on hand crews before. Several came from Pine Valley's Forest Service firefighting organization, and several came from Teasdale and Bicknell, and some that were out of Panguitch, which were also Forest Service. So, this other fellow and I were the only BLM people there, and we were the only people who had never been on a hand crew before. What else?

DP: That's fine. So this is a multi-agency crew, then.

JP: Uh-huh.

DP: They pulled that together on the 8th and when did you arrive in Yellowstone then? And talk about once you got there.

P: Let me make one other distinction. In firefighter lingo, we were a Type II crew, which is kind of like being branded as second best. We weren't a "hot shot" crew; we were a "Type II" crew. Let's see I came home off of Mt. Trumbell on Tuesday night, the 9th. And on the 10th, went to the district offices and prepared to go to Yellowstone. I went down and bought a pup tent, got set up with sleeping bag and other equipment, and got my fire pack ready. Now on an engine crew I seldom used my fire pack; I only used my fire belt. I had never packed the pack part of the web gear, just the belt. So I got ready that way and on the, excuse me, the 11th, early in the morning, I went to Cedar City, travelled all day. We were part of a strike team out of Utah. There were two hand crews--two twenty men hand crews, The Color Country Crew, which was my crew, and another crew which came out of the Basin. They were called the Basin, I'm not sure, I think the Basin Regulars. They came from Vernal. We flew to Vernal, picked them up some time in the late afternoon, about four o'clock I'd imagine, and then late at night landed at the airport in West Yellowstone. We ate some of the fire goodies and piled on a bus and rolled into a spike camp outside of Old Faithful somewhere, and I'm not really firm on which spike camp it was and what the location was. But we bedded down in this spike camp at a place that was designated for us and got up the next morning and went on the fire line. What can I tell ya?

DP: Ok, tell me a little bit ah, I am familiar with the command structure from line officer down to about incident commander and his staff. Can you tell me a little bit about it, like a the structure of crews, etc.?

JP: Ok. Each fire, like the North Fork fire, was divided into divisions. You probably know that, right? And every division has what is called division "soup." A division supervisor that we call the division "soup" for short. And the division soup is in charge of a variety of resources. Now depending on the kind of resource you are, you have a different organizational structure. For example, you might be on a division that has the next level down below a division, a strike team. And a strike team is a group, say of engines. Say five engines would compose a strike team. Or a group of hand crews, two or three hand crews, would be a strike team. And below the division soup then you have a strike team leader. So every division would have one division soup, two or three strike team leaders. Below the strike team leader you have individual crews--like an engine crew would have a crew boss. When I'm on an engine, there are three people there, and one of them is designated as the crew boss. And on a hand crew, hand crew is composed of twenty people, there is a crew boss who is over all twenty. And then there are three squad bosses who are over six people or seven people each. And so our, the Color Country Crew had a crew boss named Kim Soper, and three squad bosses. One was a Vietnam vet with his hair shaved, a guy named Coor. We called him "Hardcore." There was another guy out of Escalante, and I don't remember what his real name was. We called him "The Monster." He was the second one. And then there was another guy named Bret Fay, out of Parowan, who was another squad boss. So we had the division soup, Kim Soper, and those three squad bosses and then a variety of crew members.

Our crew had three women, when we went out, which added an interesting element to the crew. Most crews have one or two, but it is kind of interesting how the personality of the crew and the squad is changed when there are women there. What else can I tell you?

DP: So your first incident that you were on was the North Fork fire.

JP: Right.
DP: And, ah, how long did your first assignment on the North Fork last, before you got to another? And what did you do?
JP: Oh, ok. You want it day by day?
DP: Yeah.
JP: Ok, on Friday the 12th of August we had fourteen hours. We, there is a small camp ground with picnic tables there at the junction between the Madison, where the Madison River runs, and the road that goes to the lower Geyser Basin. At that junction there was a, close thereby, about three miles away, was a helicopter helibase, and there was a kind of a camp right there at the junction. We "staged" most of the day there. They didn't know what to do with us. They said, "You are going to stage." Staging means that you just wait. So we went down there. We waited. I had a novel I read several pages out of, Anna Karenina. People went down by the river and horsed around, and then in the afternoon they picked us up in some buses and they said there was a hot spot. We traveled past that junction to the east on the road that follows the Madison River, about three miles and went up cutting north from the road, found a large hot spot that was putting up a lot of smoke. Our two crews, forty people, went up and put out this hot spot. We had to hike in about four miles and we put out this hot spot by a technique called "dry mop" which is, you go in there, you build a line around it, and then you turn it and smother it with your tool until it is virtually out. The hot spot, I'd say, would have been a third of an acre. But it was still hot and it was burning in a lot of fuel and we put that out. When we came back from that, it was still about, oh, it was still light, it was about five or six.

They asked us if we would start doing what they call gridding. Now the fire at that time was burning near to the Madison River, moving northward. It hadn't gone up the north side of the canyon. But there were some little "hot spots" on the other side of the canyon opposite the fire that were jumping the fire line and moving out there as far as five or six miles away from the fire line. And we did what's called gridding. Now gridding means you get your entire crew, the twenty men, the twenty people, you spread yourself out every fifty foot and you walk through the forest looking for "hot spots." And we gridded that night until dark and then we came in at 20:30. So what is that, in regular time? It's ah, eight-thirty we got done.

On Saturday, August 13, we gridded again, all day, until evening. In the evening they decided that they were going to back burn from the Madison River, thinking they had appropriate winds and that the winds would carry the fire away from the river back toward the fire line. And they back burned and we monitored that back burn, from the river and we got done that night, as well, at eight-thirty.

On August 14, Sunday, we patrolled that, we gridded on that opposite face of the canyon, the site opposite, across the road opposite the Madison River. You have a question?

DP: No.
JP: Ok. We gridded. And they, again, talked about back burning. They did part of the back burning the night before, on Saturday night, but they were talking about back burning on Sunday night. And they did back burn and there was a wind storm and the back burn got away from them and we just worked like hell. I have noted here in some notes I have taken about my experience, "I have six blisters on my feet." So, it was a lot of

work. I was a "tender foot"; I must have been. But my feet were blistered, and scabby, and bleeding, in fact, at that time.

DP: Wow.

JP: And we got off that night at 22:30, like ten-thirty at night, after a sixteen hour day. I remember that was the night that the fire got away and it grew really quite a bit that night.

DP: Was there a wind that night?

JP: Yeah, there was, in fact, when they said, "We're going to start back burning," I think they started about six. And about six fifteen, right after they had a really good fire line laid out and starting to burn good, the wind picked up. It was just like the wind was up there waiting, "Let's see if we can, let's see if we can nail these poor bastards." And it did.

DP: Do you want to pause for a minute?

JP: Yeah, sure.

[TAPE INTERRUPTED]

JP: Ok. On August 15, it was a Monday. That back burn that we did Sunday night, the night of the 14th, blew up. And it went just crazy. And I remember this very well. What happened was they took our crew and probably 200 people and lined us out, down the highway below the junction of the road that goes to the lower Geyser Basin. And we were lined out down that road probably for twenty miles, ah, people stretched out down that way--

DP: South of Madison?

JP: Ah,

DP: From the Firehole, or . . . ?

JP: Ah, ah, well at a certain point I think the road crosses the river, or the river crosses the road and goes on the other side. We . . .

DP: Yeah, right.

JP: . . . we were on the side where the river was not between the road and the, not between the road and the fire. So that the road was close to the fire. They lined us out. And the fire line was approaching us, and at first we scattered every twenty foot, marched toward the fire line, which seems insane but we did it. We went through the very thick Ponderosa, or excuse me, lodgepole pine forest and marched toward the fire. And it was burning up and the Vertol and the Chinooks and the other helicopters were overhead dumping water on us and on everything around. We were to go in there and cut a line, a hot line, and see if we could go in there and stop it. And we went in there and cut about a quarter of a mile of a line. Me and about six other guys were in there together. And we cut about a quarter of a mile line and it got too hot and they pulled us back to the road, and it burned up, it burned up really big. And I remember it was dark because the smoke was coming over and kind of a funny incident happened. There was a woman who came walking through the fire toward us, a firefighter in her firefighter yellow shirt. I was with my BLM buddy, Dennis Derrick, this kid. This woman came up, and it was dark, smoky, smoke was in our eyes, none of us could see very well, and Dennis said to her, "It looks like you been out rolling in the fire, you're so dirty." This was when she was about 20 feet away. And she could hear perfectly well, and she came up, and low and behold, she was black. She was a negro woman, and Dennis was horrified with embarrassment. And she said, "Yeah, maybe I'll go out and roll around a little bit more." But he hadn't recognized that she was black.

So, we, we pulled out and came on to the road and watched the fire. All we did was watch the fire. There were two squads of us. There were a dozen of us. Kim Soper, the crew leader, was with us and two squad leaders. And they said to us, "Go down and watch that fire, about a mile and a half down the highway." So we went down the highway and we sat there watching it, saying, "Well, do you think we ought to go fight that sucker?" And it started to torch up big, the fire started to run. Now, to understand what happens here, you have to understand the terrain. It is a very deep canyon with steep walls and the fire was working its way down the face of the canyon, toward us, toward the highway, which is in the bottom of the canyon. The opposite side of the canyon is very steep as well. And it was working its way down toward us and we were watching it. Well, while we watched it we noticed that it was coming close to the highway below us about two or three miles, and in fact it did come down and bump up against the highway and it jumped the highway and started up the other side of the canyon. And, of course you know, that a fire going up a hill goes about three times as fast as when it comes down, and it just torched. And we were watching that and said, "Boy, that's interesting." And Kim called it in on the radio and told everybody. And they said, "Yes that's true, we are aware of that." Kim said, "Well, it's getting kind of dangerous." There were a dozen of us there, two squads, the crew here, and he said, "Maybe we'd better, maybe we'd better pack up our stuff and move up a little further up the canyon because it is moving toward us." So we put our packs on, we gathered our tools up, and we started walking up the canyon. We walked, sauntered up the canyon about a mile or maybe a mile and a half, and we saw that up above us the fire had bumped into the highway and had hooked across the highway above us. So there was a fire line that was burning fast and raging with fifty foot flames lengths above us and the fire was burning below us. Well, we looked to our fearless crew boss, and he said, "Hey, Coor, what are we going to do?" And he said, "Let's turn around and go back down." He couldn't think of what to do. So we picked up our pace and kind of jogged down until, and you know what happened, we jogged down a mile and there was the fire. And it was burning down below us, too. So we were on a piece of road that had a fire hooked down below it and a fire hooked above it. Now we might have tried to escape up the hill. But any firefighter knows that you don't run from a fire up a hill because the fire will catch you and just tan your hide. It will crisp ya. So we turned around, at that point we had ran down into the fire below us and had turned around and ran as fast as we could into the fire up above us. Then we stopped. We said, "What are we going to do?" And our crew boss said, "This looks like a case to deploy fire shelters." We pulled off our packs, we were starting to pull off our belts, we were talking about what would be the best position to deploy the fire shelter, which side of the road, where we should do it, when we heard this noise. Now, on the fire there were five volunteer engines that were the scabbiest looking things you ever saw. They were 1940-era deuce-and-a-half military trucks with huge tanks and old fashioned pumps. They were from a volunteer fire outfit somewhere in Wyoming, near Montana maybe, a very small community volunteer fire crew. And most of the people who were manning these things were volunteer firefighters who had never been on a fire. Anyway, they didn't know what they were doing. If they did, they wouldn't have been where they were. But they drove up the road through the active fire line.

DP: So this is on the paved Park road.

JP: This is on paved Park road. They drove up through the fire line that had crossed the road and was burning a fire line on either side of the road, they drove through it. And they came up into this section where we were. There was this section of a mile or two that hadn't burned across. But it was going to be burned across soon, because the winds were howling and the fire was going everywhere. We stopped them, and the twelve of us climbed on top of this, of this old military deuce-and-a-half. Our crew boss cussed the guy out. He said, "What in the hell are you doing in here? You are an idiot." And the driver said, "We're lost." The driver said, "We're lost." And Kim said, "Well, never mind because you saved our hind ends, and if you were a woman, I'd kiss ya." And we climbed on top of this old deuce-and-a-half and the driver wound it up as fast as it'd go, which is about thirty-five miles an hour, and we drove up toward the active fire line which had hooked across the road above us and drove right through the fire line. I remember holding my head down with my pot on my head, my hard hat on my head, and putting my arms around my face, feeling the heat on my hands and my face and protecting myself from it as we drove through that raging fire line. We came out above it and met with all 200 firefighters who had met at a wide spot in the road, kind of a place where people can pull out and there's a wide spot up there. And they had all gathered and they were standing there. And we came through and told them all about our story and they were all amazed that we had driven through this wall of fire.

DP: So that was on August 15, Monday.

JP: On the 16th, we chinked a mile of line. Now let me remind myself. We dug a mile of line somewhere.

DP: What does "chinking" mean?

JP: "Chink" means to clear it out and make a fire line. Clear off all the brush and grass and everything off down to the mineral soil. Our crew did a mile. Oh, yeah, and then, it was a new place, it wasn't down there. It was, it was, we had to, it was quite a ride. And I can't really tell you about the geography on this day. But we chinked a mile, a line, and we dry mopped all afternoon and then we came home.

[TAPE INTERRUPTED]

DP: Ok, we're back running.

JP: Ok. Ah, we've just finished with August 16. Some of the, on August 16, I think it was August 16, I'm not sure, maybe it was later. Ah, I became aware that some guys I knew raped a girl in camp. Now down here in Utah we have a con-crew, it's called a convict-crew. It's convicts at the Point of the Mountain that go out and fight fires. And they are called the Flame-N-Goes. It's like flamingo, the bird, but . . . .

[WRITTEN SUPPLEMENT]

JP: On August 16th, our crew moved into an area north of the road that parallels the Madison River. I remember that we parked our bus and tool trucks in a large gravel pit, probably about thirty or forty acres in size. The fire, as my interview pointed out, had jumped the Madison river in a large wind storm on August 15th, and the fire overhead were concerned to limit the fire's spread on the north side of the river.

Overhead had assigned our crew to chink a line back in the rough country south and east of the large gravel pit, but still some distance north of the highway and the Madison River. During the morning we worked hard, clearing roughly a mile of handline. I remember that our two sawyers and their swampers were running the chain saws to clear larger trees and brush ahead of our line-digging crew. The saws ran almost

constantly all day. In the afternoon, the sawyers ran out of gas and two-stroke oil, and because I liked walking better than digging line by that time of the day, I volunteered to walk back down to the gravel pit and the tool truck to haul back a few gallons of gasoline. I followed the handline back to where we had begun digging it that morning. It seemed so nice to be away from the noise of the saws and out of the dust and smoke of the handline.

When I returned, I witnessed an event that highlights the bravado of "ground pounders,". the people who form the front-line attack on any fire. One of our sawyers, a fellow named Richard, had tried to fell a very large lodgepole (probably a fifteen- or eighteen-incher); however, instead of falling in the direction that Richard had planned, a good breeze caught the tree, and it began to fall in a direction contrary to the notch Richard had cut. The tree fell and caught up in the branches of a neighboring tree. Now, "Hard Core" (Tim Coor)--a Vietnam Veteran who continually spouted glory-gory stories about the war--stood watching as Richard's swamper, a fellow named Jared, tried to push the large lodgepole free from where it had caught up. The lodgepole was green, huge, and incredibly heavy. Hard Core laughed and suggested that instead of pushing the tree free, that Richard should cut down the second tree.

Richard stood and surveyed the situation. To cut down the second tree, he would have to stand directly underneath the large lodgepole. He refused.

"Hell's sake," Hard Core said. "Give me the damned saw, you coward!"

Richard and the rest of us argued that it was incredibly dangerous and that it was better left to fall by itself later, but then we all took Hard Core's abuse as "Yellow-bellied, lick-spittle, cowardly bastards."

"Okay, fine!" Richard said. "Here's the saw."

Hard Core took the saw and cut the notch so that both trees would fall as they were inclined. Then, standing directly below the heavy lodgepole, he began his back cut. We all watched nervously, waiting for the initial crack and groan that inevitably preceded each fall. Without even watching the tree above him, Hard Core cut the neighboring tree until it was fully detached and had begun its graceful arch groundward. We all screamed at him to move, but he continued to cut, throwing wood chips in all directions.

Finally, the very moment before the tree would crush him, Hard Core stepped deftly out of the way, calmly turned the machine off, and set it atop the newly cut stump. "What's the matter with you chicken sons of bitches anyway?" he asked calmly, and he swaggered down the hill.

During the latter part of the afternoon on the 16th, we dry-mopped (put out hot spots without the benefit of water, using pulaskis and shovels to turn the dirt until the embers cooled). We finished the day earlier than usual, at about eight-fifteen.

At this point, I could tell you something about the daily routine of camp life for a firefighter on a handline. We were getting out of our sleeping bags at five in the morning, although after about three weeks, we could no longer sustain those kinds of hours and slept in till six. There was nothing but discomfort from the moment one got out of the sleeping bag until he fell back into the same bag late at night. And even sleeping wasn't comfortable, since the entire crew slept under one plastic tarp that had been stretched over an open piece of ground between errant lodgepoles. Even before we had been in our bags five minutes, a chorus of snores rose from the prone figures. "Jab Hard Core in the ribs so he'll

shut up," one of the crew members would say. The snoring would stop only briefly. My forward-thinking FCO (Fire Control Officer) from my home district had insisted that I take a pup tent along with me. I was the envy of the entire crew, since the tent allowed me to sleep at some distance to the snoring. However, even at a distance from the snoring, the background noise of the fire camp continues all night while diesel generators throb and groan. Also, one learned to collect the fire-issue paper sleeping bags from supply and pile them three or four thick under his sleeping bag to lessen the effect of sleeping on cobbled dirt. Before my thirty-seven days on the fire were over, I had collected five paper sleeping bags, so I slept fairly comfortably even on the coldest nights and atop the roughest spot of ground.

Morning's were cold, and since I hadn't brought a coat, I found myself dressing in layers of t-shirts, an old sweat shirt, and finally my soot-blackened, flame retardant fire shirt. By the end of my stay in Yellowstone (September 14), it was snowing at night, and some of the morning lows had dropped to the twenties. Cradling cups of steaming coffee in each hand, the firefighters would stand as close as they dared to "salamanders": Diesel-burning smudge-pots that were usually used to keep the orchards from freezing, had been adapted to warm those waiting in the morning chill.

The camps were also incredibly crowded, so every necessity was taken care of only after a good deal of waiting. A line of five or six firefighters waited before each of the acrid-smelling toilets, plastic portable "potties" that a sewer truck sucked clean every afternoon. Inside, one often found that there was no paper--only after making paper a necessity. Soon I learned to steal a small roll of paper and keep it in my back pocket always. Even though there were three rather genteel women on my crew, the inconvenience of using the camp "johns" reduced the men on the crew to urinating against the nearest tree, regardless of who was present.

Meals were well cooked and filling, but just as at the toilets, a gigantic line of grouchy firefighters always waited to be served, so that only on rare occasions did I eat a meal without waiting for ten or fifteen minutes. Every meal had some greasy meat item. About the steady diet of greasy meat, the firefighters created and passed along a prophetic proverb: "Lighting strikes and a thousand pigs die!" Sausage for breakfast, ham sandwiches for lunch, and a porkchop for dinner. Working as hard as I was and expending untold calories, I still gained weight on the fires. Besides the fatty meals, there were long tables on which rested constantly replenished supplies of Snickers, Licorice, and Kudos Bars, along with oranges, apples, and grapes. I always stocked my yellow firefighter's backpack with a huge supply of Mars Bars along with an occasional orange, and I soon found that if I were to keep myself "regular," I had to take a daily bunch of grapes. For drink, there was the constant Gatoraid. When I was out on the handline, I always packed a gallon of liquids. On many occasions I found that, sweating as I dug fire line within feet of active flames, this gallon of liquids wasn't enough. However, I learned to make the most of it by packing Gatoraid instead of water. In the mornings, I would grab five or six cans of Gatoraid (lemon lime, if possible; if not, fruit punch; and in the absence of those flavors, plain water--orange Gatoraid will kill you!), and I would pour them into the plastic bottles that I carried in my pack and on my belt.

Bathing in the fire camp was as fraught with danger as eating. Depending on the camp, the showers were housed in a converted mobile home or trailer. Usually eight bathers washed themselves cramped into the small eight by ten or twelve space. Galvanized pipes carried the water from a tank outside (where a propane tank fed a flaming water heater) above the bathers' heads. Often, instead of shower heads, there were plastic hoses with which the bathers wet themselves, scrubbed with soap, and then rinsed after scrubbing. I remember one night when the "con-crew" (convicts who were released from prison to help fight the fires) called the "Flame-n-goes" were all waiting to shower. There was a particularly heavy demand that night, so that approximately forty or fifty of us stood naked, soap in hand, waiting for a short turn in the water. One of the cons joked, "Well, here we are like always--nuts to butts!" I remember standing there naked, convicts in front of me, convicts behind me, thinking of the inevitable horror stories about homosexuality in the prisons.

Sherry, a very out-spoken woman on our crew, got confused (or so she says) when she was going to the women's showers, and, instead of walking into the women's dressing room, she walked into the dressing room where all forty or fifty of us stood naked. She shrieked in laughter, and what struck me as proof that she really intended to walk into the men's dressing room in the first place was that, after she had left, she turned around and took a second look. Of course, the convicts all loudly invited her back.

That was the night before two of the convicts raped a woman firefighter and were all sent home. I remember that on one morning, I saw two of the cons talking to a girl, flirting with her, and I saw that she seemed to respond to their flirting. I asked myself, does she know who they are? Later that afternoon I heard about the rape over the radio I was carrying.

Bathing took almost more effort than it was worth. I remember going two days without a bath. That may not sound significant unless you consider the fact that I was literally rolling in ashes all day long. One member of our crew whom we affectionately called "the Monster" would go for four days without bathing--so long that we all earnestly petitioned him to bathe just to control the noisome smells on our bus.

Living in the fire camp was work, not relaxation. I felt like, even though I was not on the pay-clock while in fire camp, I should have been since it was overall so uncomfortable.

Having said that, let me continue with the daily narrative: In my notes, I call August 17 "Hell day." Early in the morning, just after first light we loaded onto helicopters and flew into the back country. I learned later that we camped at a spot very near the continental divide close to the junction of the three states Idaho, Montana, and Wyoming. Were about fifteen miles from the nearest road and I saw no trails up there, other than the one we made ourselves as we cut handline.

We were at what is called a "spike" camp--an impromptu camp that is set up and taken down quickly, without the amenities of sewer or showers. We had to leave our red fire packs (in which we kept most of our gear) down in our regular camp, and unthinkingly, I failed to bring extra socks so that I used the pair I wore for four days. There were three our four twenty-man crews (firefighter language is unashamedly sexist) at that spike camp. At least one of the crews was a "hot-shot" crew, and the rest

of us were category-two teams, so that the rivalry that exists between crew types was rampant in the camp.

We cut "hot-line"--a handline that is cut close to active flames. In theory the flame will burn to the cleared line some eight or ten feet away and die. Each crew was lined out on a one-mile stretch of proposed line. As one crew finished a line, it would "leap frog" forward and begin a new one mile segment. With three twenty-man crews digging lines, it seemed that we made fast progress. The beginning miles were on rolling terrain cut through small stands of timber and large meadows of blonde colored grasses. The soil was grey-white, flected here and there with chips of the obsidian rock that native Americans carried throughout the plains and traded. Because grass root is deep and tangled in the soil, this line was difficult to cut. However, as difficult as it was, soon we moved into rugged terrain, up through vaulting canyons, over sharp escarpments and down through rough water sheds.

By one o'clock in the afternoon, all the crews were exhausted, but the division "soup" (supervisor) had walked ahead several miles and had seen that the active flames were flaming even higher and burning faster. It was a warm afternoon, and with plummeting humidity, fires became hotter. The "soup" exuded urgency. "We got to get this line poked through," he barked over his hand-held radio. Even though we hadn't had any breaks to speak of, not even lunch, our crew boss (Soper) and squad bosses urged us on. Occasionally, one or two of us would take five minutes out of the line to wolf down our ham sandwich, then step back in to chink. We had been cutting line since about eight-thirty that morning, and now, as the afternoon progressed, many of us wondered if we would be able to continue much longer. But still came the urgent division "soup's" voice over the radio: "It's going to blow-out on us. Let's get that line in place!"

On we worked until dark, swinging pulaskis and scraping with shovel blades, stopping only to gulp liquids. This, I think, was the most difficult day of the thirty-seven I spent on the fire. I never imagined that I would have to work so hard. I can remember when I had gone for my physical earlier that spring. The doctor was asked to certify my physical shape by filling out a form that said, among other things, that I should be able to perform strenuous manual labor for eighteen hours. My doctor had asked me, "Can you?" At the time, I never imagined that I would have to, so I laughingly answered yes, despite the fact that I had little confidence that, really, I could. That day, as passed hour after hour of the most painful kind of labor, stooping to chisel roots out of the handline with the pointed blade of a fire shovel, rhythmically standing and stooping to swing the pulaski, there was some gratification in knowing that if pressed into it, indeed I could do what I hadn't thought possible the spring before: eighteen hours of strenuous manual labor.

We marched back to our temporary camp sometime after dark.

The spike camp had been set up in one of these grassy open meadows in the back country. Apparently it had been there for several days, and piles of boxed supplies had been "slung" in on helicopters. Our "soups" had told us that bears had been invading the camp, so that we were to sleep several hundred yards away from the food and any gear that might have the smell of food. I can remember bedding down sometime around midnight. The evening had been crisp and cold, and as the night air stilled to an absolute calm the night-time noises amplified themselves across the canyons. One could hear everything from birds to clattering

limbs, but most eery of all were the sporadic explosions of "snags" (burning trees) that, their time come at last, burned until they fell with a violent crash to the forest floor. I remember that the night sky would flare over the horizon where such a snag would fall, and if the snag were within a few miles, we could see streams of sparks fly into the indigo sky. It was really haunting how every five minutes or so another snag would fall and explode into glowing sparks in the sky. One would be absolutely exhausted, trying to get to sleep, but when a snag fell and exploded, one would snap back awake and listen to the crash that echoed through the canyons. The noise was weird: The initial crash was loud, but it would trail away in echoes and finally die as an ever diminishing hiss. Needing sleep desperately, one would again nearly fall to sleep when suddenly another snag would explode. I remember listening to the explosions and watching the orange pulses of sp9arks over the black canyon-scape for what seemed like hours.

On August 18th, we patrolled a several-mile long stretch of the line we had put in the day before. I remember walking up and down a segment of the line, perhaps a mile long, watching for spots that had jumped the line. On two or three occasions, a radio call would summon me to a hot spot that had jumped the line. Usually the spot would be about a tenth of an acre, and it would be burning slowly about a hundred feet "in the green" (as opposed to "the black"). However, about three o'clock when heat was up and humidity was down, my friend Dennis Derrick and I came on a major "blow-out." The fire had jumped the line and was raging in about two acres of dead and dry fuels. Feverishly, we began to dig a line to confine the burn, chopping off burning logs with our pulaskis and pulling fuels out of the way of the advancing fire, but before we had been working ten minutes, it was clear to me that we needed help. Neither of us was carrying a radio, so I left Dennis on the blow-out and ran back down the line for about two miles, sending the few firefighters I came across toward the blow-out. Finally, I came across one of our sawyers, Brett Faye, who was carrying a radio. He radioed for help, and a hot-shot crew from below the blow-out and several members of my own crew headed back to the blow-out. The blow-out had spread to about twice its size by the time I returned. Our gathered crew members, numbering now about six, "lined out" to dig line, and our sawyer began cutting through the fallen litter so that we could remove the fuel from the advancing fire. From below, the hot-shots attacked the fire, and within about an hour we had contained the blow-out.

During that two-hour stint, from the time we found the blow-out till we contained it, I spent the remaining modicum of energy I had left, and when the division "soup" arrived, I sat stupefied with Dennis Derrick, Brett Faye, and several of the members of my crew. I can remember how it stung when the "soup" called us lazy and urged us to our feet to mop up the blow-out.

That night we stumbled back to our spike camp, ate our cold dinners (meals in spike camps are always cold), and slept poorly, disturbed again by the intermittent explosions of falling snags. We arranged ourselves with our heads toward the camp fire, our feet radiating away from the fire like the spokes of a wheel. during the night, "Hard Core" (Tim Coor) would stir himself every couple of hours and throw a few more logs on the fire.

The following day, August 19, we dry mopped all along the fire line we had cut on the 17th and maintained on the 18th. Our line had held more

or less, and now, after the fire had burned to our handline and settled for about thirty-six hours, the embers were beginning to cool. With a certain feeling of triumph, the sixty firefighters who were working from our spike camp, began to feel jovial, as though on our small twelve- or fifteen-mile front, we were beating the fire. We worked energetically until about two in the afternoon when our supervisors got a call on the radio that alerted them that, even though the fire had been effectively suppressed on our portion of the line, it had blown up to the south and, at a distance of ten miles or so, it was raging out of control and moving in our direction. From our position near the continental divide, we could see boiling columns of dense smoke to the south, and we began to watch the heavy helicopters hauling six hundred gallon loads of water toward that raging fire front. Within an hour or two, at about three or four in the afternoon, we knew that we had to evacuate. We also knew that, despite all our work, the fire would hook around the bottom of our line and advance through the very area we had thought we had saved.

The feeling of defeat is inexpressible.

Taking our orders from "overhead" (supervisors high on the chain of command), we trudged toward the south, hiking for two or three hours, till we came to the nearest road, a timber access road. Now, Dave, if this will help you orient the events on the map the timber road ran to what they call a "blow over"--an area where high winds the year before had knocked down several hundred acres of lodgepole pine so that the trunks were scattered like giant match sticks.

In a cramped school bus that had been designed for elementary school children we rode with our knees chafing against the seats in front of us over bumpy roads for a couple of hours. The night of August 19th, we rolled into a new camp at the Madison Junction Campground. It seems our old camp was in danger of being "burned over" so what all those stationed there were forced to move on. Somebody had packed up our red fire packs and sleeping gear, and when we got to Madison Junction, we found our gear dumped in a camping spot near a fire pit. We set up the plastic tarp that served as sleeping quarters, and, utterly exhausted, bedded down after midnight.

The morning of August 20th brought an interesting surprise. As we sat on the bus to ship out to a new division, a young doctor working for the Occupation Safety and Health Association (OSHA) boarded and asked those there for volunteers to participate in an experiment. Apparently the dense cloak of smoke that rested over the entire Park led authorities to fear for the health of firefighters. I was one of six volunteers. In the morning, OSHA workers took a blood sample and, using an apparatus that was attached to my fingernail, they measured the level of oxygen absorption in my blood. Then they attached three glass cylinders to my collar--filters to measure the level of noxious types of gasses I was breathing--carbon dioxide and sulfuric gases. I wore the filters all day long, then later that night, OSHA workers measured oxygen absorption once more and took another blood sample. Some months after the end of the fire, I received a report from OSHA that stated that while the levels of gases were not toxic, they were somewhat high. However, the levels of noxious gases were not above those specified as acceptable by OSHA. The letter came as some comfort, since I recognize that during my stint in Yellowstone I breathed a tremendous amount of smoke and ash. Firefighters jokingly referred to large black "boogers" that we picked each day from our nostrils as "hazard pay." One might jokingly ask, "Get any hazard pay

today?" And the responder might slip his finger into his nostril, produce a great gob of black snot, and say, "Just look at this hazard pay, will you!"

Our crew was assigned to cut a line in a division that was to the east of the large gravel pit I mentioned earlier. We hiked several miles down a handline that other crews had put in a day or two before, and when we reached the end of the line, we extended the line farther. We had only dug about a half mile of line when we broke for lunch. I remember sitting in the afternoon sun on a south-facing hill, my back against the trunk of a tall lodgepole. While eating, I began to feel the trunk of the tree shifting from side to side in a gathering breeze. Before long, the tree was dashing from side to side in a heavy wind, and we were radioed that the wind storm had kicked the fire over the lines below us and that the active flames, though still at some distance, were beginning to run toward us.

We all scrambled to our feet, threw on our fire packs, and headed back down the handline in the direction we'd come in hopes of arriving at the bus before the fire did. The winds continued to whistle through the trees as we trotted over the rolling terrain, and when we reached high ground, we could see the fire blowing up, the smoke rising in billowing columns. Hurrying as fast as possible, we reached the bus and evacuated the area. While I had to run to escape the fire, I had once again been struck by the futility of what we had done during the day. We had hiked several miles and dug handline for several hours, working very hard, and the fire had again overcome the collective efforts of hundreds of firefighters. As I sat on the bus and watched the wind whip the flames into a frenzy around me, I was exhausted and demoralized.

In the later afternoon, the winds calmed, and we were assigned to a new area where we put out hot spots until dark.

The following day, August 21st, we gathered up hoses in an area that parallelled the road that runs north and south past the large gravel pit. Apparently, a day or two before, firefighters had dug a handline parallel to, and west of that graveled road, and in hopes of holding their line, they had laid an inch-and-a-half hose lay (one hundred foot sections of cotton-jacket hose with lateral fifty-footers and "forester" nozzles). This hose lay was probably three or four miles long, and there had probably been a "heavy" pumper that fed the hose lay while one or two engines freighted water from the river. Firefighters had been successful in holding that line, and form what we could see, the charred line between "the black" and "the green" was cold and presented no further danger.

Our job for the day was to break down the hose lay, drain it of water, roll up the hoses, gather the fittings, and "jack-ass" all the equipment to the road that paralleled the hose lay a mile to the east. Basically, we broke down hoses and hiked. The hose lay consisted of hundreds of hundred footers and fifty footers. A firefighter could carry two or perhaps three hundred footers, or he could carry three or perhaps four fifty footers. The hike from the handline to the road and back averaged more than an hour. From the morning till the later afternoon we marched back and forth between the handline and the road, jack-assing as much equipment as we could carry each trip. As the crew dissembled the hose lay, the handline veered more to the west, so the distance between the handline and the road increased and the "turn-around time" became longer. We learned that a contractor with a pack train of horses, eight horses in all, had packed the hoses up the trail, tossing off equipment as

he went, and as we trudged, we wondered where the same contractor and his horses were that day. And we wondered if overhead could make better use of its resources.

In my opinion, there was very little vertical communication. Tim Catlin, a fellow hand crew member, said it best: "Overhead treats me like a mushroom--they keep me in the dark and feed me shit!" Those at my level, the lowest level, the "ground pounders," felt that very little effort was made to fill us in on procedure and objectives. The result was that often we felt disoriented and irritated at leaders.

Later in the fire, I attended two or three "overhead" meetings held in the auditorium at Canyon Village a half hour before we boarded our busses in the morning. In those meetings, the IC (incident commander), the weather officer, the person in charge of air resources, and other directors spoke about overall objectives and goals. In those meetings, I got brief glimpses of the "big picture." However, if I hadn't forfeited my breakfast time and went with Kim Soper to the auditorium, I would have known precious little about main objectives, fire conditions, and administrative projections.

Late in the day of August 21st, we hauled one last load of hoses out to the road and we all gathered at the entrance to the gravel pit. Some Christian soul had brought a galvanized garbage can filled with several bags of ice and a couple cases of fruit juices to the gravel pit, so we all sat for a few moments, relaxed, told stories and tipped back a few biting cold juices. And, as though to improve on the mood, our so-called strike team leader," Vladimir, told us all that he would run interference for us while we "copped some zees" (slept), hidden in the depths of the forest. so for a time--perhaps as long as two hours--I lay in the sun and snoozed with a belly full of fruit juice.

We finished that day earlier than usual at about seven, which allowed us to hit the showers before the lines formed.

[END OF WRITTEN SUPPLEMENT]

JP: Um, August 21, that was a Sunday, we'd been there for ten days, we went to the same canyon we almost got burned over in. Now there is a power line that runs north of the road, parallel to the road, it is north though, of the road. That power line had been burned over but they had put up a hose in there to support the fire line and our job was to haul all that hose out. And there were probably five or six miles of hose that we wound up and packed out on our backs. All day long we were packing hoses. Go pick up a hose, walk a couple of hours and get it out, and then go back get another one, walk a couple of hours, and get it out. We did that all day. Ah, our division soup on that day, I have noted in my notes, that he gave us two hours of standby. He recognized that we were all exhausted. We went out into the woods, and I remember lying down on a hillside, away from everybody--up there by the power line was a gravel pit, we were just off that gravel pit--I was up into the brush, I lay down. He had said, "Hide for two hours, no body is going to talk to us, I've got you off for two hours. Hide." And I lay down and I slept. Utterly exhausted. And I had to be wakened when they finally found me. They were yelling for me and they woke me up. But we had a couple of hours of what they call standby. And I laid there and snoozed. That night we got back at 1900 hours and only had a thirteen-hour day. So it was a fairly easy day.

On the 22nd, we'd been hearing rumors that we would get R&R, and all of a sudden we were. We got up in the morning expecting to go out on the

fire line, and they said, "You've got R&R." And we went to Cody, Wyoming and spent the day at a little dude ranch about five miles out of town, Cody, Wyoming. We spent the day in Cody looking at the art museum and then went that night to this dude ranch. And I slept in a bed and didn't get up until ten o'clock the next morning. I just remember the sense of a sleep deficit and a sheer exhaustion. And I couldn't believe how luxurious it felt to take a shower. In a real shower. I stood in the shower and showered until the hot water was gone. And then again before I went to sleep I took another shower and stood in the shower until the water was gone.

The next day on the 23rd, we continued R&R and we returned to camp through Old Faithful. I was amazed at all the tourists that were in there. On the 23rd. There were all these tourists going around.

The next few days, the 24th and the 25th, we spent clearing a wide fire break around West Yellowstone. There to the south of town, the town butts up against the forest. We just cleared out the forest for 100 yards. We took chain saws. But I was the chief man on a pulaski. Somehow I got the knack of cutting down these seedlings better than anybody else. And I could knock them down one at a swing. Just whap, whap, whap. Clearing out seedlings. Just walking along, then people behind me picking 'em up. And I did that all day. Ah, I had sore muscles and blisters all over my hands.

The next day, on the 25th, we continued to clear a, a, a break there around the perimeter of West Yellowstone.

On the 26th we ah, we ah, we got up in the morning and moved our camp. We went up to, what's the name of the place?, Canyon Village. At that point, we were in the Wolf Lake fire, Dave. Not the North Fork. You know, they split the fire in half.

: Uh-huh. Back to West Yellowstone for just a moment.

: Ok.

P: It seems like I remember you telling me about somebody and a chain saw.

: Yeah, ha.

: Who was that and what was . . . ?

P: Ok, well we were cleaning up the fields behind some homes. Of course all the people in the homes were people who worked either with tourist services or in the recreation industry there. Apparently there is some kind of a statute in town that people cannot run a chain saw after one o'clock in the afternoon. And we were running the chain saw and they came, and we kept running it. We figured, "Well, ok, there is a fire approaching this town and it may burn the damn thing down. Surely they won't mind if we break this statute." So it turned out the people whose houses are on the edge of town, whose house would be the first to burn down were angry that we were using chain saws out there after one o'clock. They called the police, and the police came out there and told us that we could no longer use chain saws. For the rest of the day we chopped trees over with pulaskis. If you can believe it. It seems asinine. And then chopped them into pieces so that we could haul them away with dump trucks. It killed us. What do you think of that?

: I'd rather not say.

: Ok.

: It sounds pretty stupid.

: It does, doesn't it.

P: Was it because, I think the reason for the ordinance is because of fire hazard. Or is it because of the noise? Ah, I believe it is because of fire hazard.

P: I don't know what it is. Ah, it may be, but at one o'clock the humidity drops and it heats up and there may be a fire hazard out there. But there is that ordinance. After one o'clock you can't use a chain saw. And the people were the ones who got the cops out after us. The people whose homes we were protecting.

Oh dear, . . . ah, let's see, the 26th we went to new division and mopped up along the fire line. We laid a hose lay and we used the hose, there was a lot of water pressure, there was . . .

P: Is this up on the, on the Wolf Lake now?

P: It's on the Wolf Lake. And the area we were on was north and east. It was along the road that goes toward Dunraven Pass. So it would be along here, somewhere. I don't . . .

P: Past Canyon Village up toward Mt. Washburn.

P: Right. Right. And there was a fire line, there was a hose in and we mopped up all day long. We were camped at Canyon Village. Now Canyon Village was a new fire camp. It had showers. Real showers. With a lot of hot water and a lot of pressure. You'd go in there and turn those things on, there's tons of water pressure and tons of hot water, and you would go in there and they would give you a towel and your own individual bar of soap. It was luxurious. Ah, we loved it. I just remember feeling like I was in the lap of luxury. We'd come home every night and I'd pile off the bus and instead of going up to camp like the other dodos, I'd go straight to the showers and leave all my equipment stacked outside the showers thinking that if anybody stole it I would just go to ah, to the warehouse there and get new stuff, and climbed in the showers and, first in line, and just stood there while everybody, while the line built up. Hoggishly showering until my skin wrinkled up, and oh, it was nice. That was lovely. That was on the 26th that we went to that new camp. It was after mopping up all day. Well, let's see. Ok.

On the 27th, we began working a division that we were to work in for some time. Dunraven Pass is at the top of a canyon and the road is in a draw. The road goes all the way up a draw. It goes up to the north, and to the east, so the road heads northeast. The fire was in a basin to the west of that road. They decided that we were going to prop up this road, we were going to make a fire line and back burn from that fire line near this road. It was all the way up Dunraven Pass and then down through a draw, I wish I had a map here and I could tell ya exactly what the draw was. But we put a fire line in there on the 27th. It was a very difficult day. The grass we were in was Salt Grass and it was thick. We were brushing, getting buffalo out of the way so that we could build the fire line. And, ah, after we built the fire line we had some drip torches and we back burned. And I could not believe how that back burn took off. It was burning, it was going the right way. We had down-canyon winds, which is the way we wanted the fire to go. Down the canyon. And we started the fire and it took off. And we sat for a couple of hours and watched that sucker burn. I cannot believe how explosive, just like nothing. Up on top of Dunraven Pass we could look out into the west, and you were above kind of a inversion, and you could see for miles. You could see those fires burning for what seemed an eternity, just a huge, massive expanse of fire. It was quite a sight. We sat there until the sun was going down and watched the fires burn. It was amazing.

That night, on August 27, the overheads, the big shots, all got together and they said, "This fire's killing us. We're not making any headway against it." So they decided to pull people off the fire lines and do structure protection. Protect the things of cultural significance--like Roosevelt Lodge, Petrified, Petrified Tree, Old Faithful Lodge, and things like that.

But that night, we were coming off down Dunraven Pass while our fire line was burning away from us, and we had a spot fire on the opposite side of the road and it blew up like nothing. It was late at night, it was probably ten o'clock at night, and we were exhausted. We could hardly hold our heads up. And so what happened was all the engines from down in Madison Junction drove up there, and the engine crews took it over while we went home and hoped they wouldn't let the whole thing burn up over night. But they put it out. Let's see. What do you want to know, Dave, am I telling you what you want to know?

No, this is good. This is good. If you don't mind.

Ok, Ok, On August 28th I want to tell you about, something about what it is like to work on the fire. If you are a Type II team, which is what we were, you look at the Type I team, which are these hot shots, and they fight fires as a team on hand crew all summer long. We did, we looked at them and a, a they are snooty, they are proud. They are select. And they have their own kind of coherence as a group. They are very self-directed and inward as a group. And they will not be friendly to anybody outside of their group. They have their own identifying features, like some of them will custom-make their own tools. They'll take a shovel and with a torch, they will bend it so the shovel has a different angle. Then they'll cut it out so it has a different edge, but it is some custom tool that they make. They'll carry these things around like they are God's gift to fire line.

They themselves are God's gift to fire line. Well, there was a group of them that we were forced to work with. They were called Baker Lake. They hated us and we hated them. They were snooty. They felt like they were, like we were idiots, but we knew they were. Well, our job was to build a fire line and their job was to back burn. It was as though they were above building a fire line; instead, they got to deal with the back fire. Late in the afternoon, they were back burning from a fire line that we had dug, and it jumped the fire line and they stood and watched the back burn. They stood and watched it as it jumped the fire line, and they told us to go put it out. So I jumped in with two other guys. We were the only ones there, and there was a small, small jump, small break in the fire line, and we were trying to put it out. It was burning in flashy fuels, burning quite hot, and we jumped in there and fought it and put it out with shovels. And it burned my ear. It was up against a torching, a doug fir, that was torching out, and the radiant heat off of it burned my right ear. So much that it blistered it and the skin all pealed off within a couple of days. Kind of a raging back fire that we fought.

But the Class I team . . . ?

The Class I team stood there and watched it. They were a bunch of turds and we hated them. I have in my notes, "Worked with the hot shot crew from Baker Lake, Washington. A bunch of bearded jerks."

Huh.

Well, let's see.

On the 29th we monitored that line, the one we'd been working on. Late in the afternoon there was a hot spot that we put out. We had to

work quite hard on. It was way at.the top toward Dunraven Pass. It was very tiring.

OK, on August 30, we got moved off of that area and went to a new area. An area that I remember very clearly, it was my favorite area. It was Hayden Valley. Do you know where that is?

P: Yeah.

P: We were trying to save the winter range for the buffalo. Before we came to Hayden Valley, they burned a fire line all the way down the edge of that grass into it about ten miles down the valley and we went down to the end of it and kept working. And on August 30th we hiked down to the end of the valley, and I couldn't believe the wildlife we saw. We were sitting on a hill looking at some companions about 100 yards away, and they were lying on the hill watching this back burn, when from behind them some coyotes came up and stood within about ten feet and sniffed them. It was also that day that we were down having lunch by Alum Creek, which runs down the middle of Hayden Valley. We were sitting down there by the creek. There was me and one other guy, a guy named Tim Catlin. We were sitting there and we heard everyone yelling up and down the line. I said, "What are they yelling about?" And I stood up and I looked around, I didn't know what was going on. And then I sat down and started eating my lunch again. And they were still yelling and whistling and making all kinds of noise. We didn't know what was going on. So I got up and walked over to the, to the, ah, there was a trail that was right there, and my division soup came running down the trail and said, "You idiots, didn't you see her?" I said, "What?" He said, "Look right there." And I looked over and right by where Tim was seated, now he was still back where we were eating lunch, was a grizzly sow working her way down Alum Creek where we were sitting. And I yelled at Tim and he came hustling over to the path. The sow was within 200 yards. He came hustling over to the trail, and we saw this big old sow grizzley with kind of a silver hump on her back, huge purple lips, this awful feral glint in her eye. She was that close to us. Well the division soup got on the radio and said, "Is there any air support in the area?" And this helicopter responded and came over within about sixty seconds and chased this grizzly across the Hayden Valley, which is flat, and we saw this thing run. And I have never seen anything run so fast in my life. Everybody says, you know, if a bear attacks, run. Anybody who says that is an idiot because nobody could ever outrun a bear. One second that bear was on this side of the valley and the next second it was on the other side of the valley, disappearing as a dot over this hill. It was amazing. It was the most bizarre thing I have ever seen.

There were buffalo up and down that valley, all over the place. It was that day that I found a buffalo horn and I stole it. The Park doesn't want people taking that kind of thing out of the Park. Well, I figured I had special dispensation. If I was going to be in there fighting a fire, I was going to take that buffalo horn. It's here sitting in my house. Nobody will say anything about that, right?

P: Right, right. You can edit this out.

P: Yeah, ok. Well, you don't need to edit it out.

P: No, I'm joking. But you still can.

P: Yeah.

P: If you want.

P: Ok.

About August 31, the army came in. And they were a bunch of idiots. They are all nineteen years old, and my view is that they are people who washed out of high school, so they ended up in the army. The same kind of tension that existed between category one teams and category two teams existed between the rest of us and the army. We hated the army. They were a bunch of idiots. We got up in there, on the 31st of August, up in Alum and we were going to back burn with the Army's help. We tried to get the army to help us. Now to do this you give every person a fusee and you stagger them: One person will walk by the fire line that you've dug and another person will fall behind him, about ten feet and over about ten feet farther from the line, and burn behind him. And then you stagger back in a stair fashion. And we lined these guys out to do this, these army guys, and they couldn't figure it out. They'd start walking and pretty quick they just be milling around aimlessly. We just couldn't take it, so we decided we wouldn't work with them any more. From then on whenever we saw them, we whistled the theme to Gomer Pile and, and, whenever we'd march, whenever they'd march they sing these goofy army songs, you know, "I don't know but I've been told," and whenever we'd march we'd whistle Gomer Pile. They were a bunch of idiots.

Let's see, I think it was the night, no, on the night of September 1 we hiked down Hayden Valley, twelve miles, got clear down there and worked all day on this fire line and started back burning at night, and we back burned until two in the morning. And then we went back and slept, slept right on the fire line. They didn't, we didn't have sleeping bags or anything. We just curled up in the ashes. And they, we ate our MRE's, Meals Rejected By Ethiopia, that night.

And the following day we got up at seven o'clock in the morning and went out on the fire line and monitored it. We back burned that night. It was amazing, Dave, I wish I were more articulate about this now, because I'm not doing a very good job. But we, ah, we back burned, and the wind was blowing toward us. Which is bad. You want the wind to be blowing into the fire, not into the green. It was going the wrong way. So the smoke was coming into our face. And we were in the heaviest smoke, for all night long. Breathing and working in dense, dense, dense smoke. And you couldn't see in front of yourself, you couldn't see what the fire was doing, it was eery. And it was in the middle of the night. We did it until two or two-thirty. And, ah, ah, we had our goggles on, we had a bandanna over our face, but still you could hardly breath. Your nose was running all the time. And you would be, you would pick big black boogers from your nose, all night long. Just black, soot in your mouth, your teeth gritty, we kept breathing it and wiping it in our bandannas that were right over our noses and leaving it there.

That was September 1. On the 2nd we went back down there and worked and it blew out on us. We were all the way down Hayden Valley, about fifteen miles about this time. And, the poor chain saw guys had to pack their chain saws all the way down there. We were packing our own food and stuff but they had to pack saws. We didn't come out that night. The night of the 1st. We stayed in there. And then the next night we came out.

I say in my notes, September 3, "Short night's sleep, went down at two o'clock, monitored the line where we burned it, found a few hot spots." We flew out late September 3. We got to fly out on a Chinook. Saw some bears as we flew out. There was a big blow-out on the line.

September 4. I have in my notes, "lazy day." And it was. We sat on the bus all morning long.

)P: Was the bus going any where? Or you just sat?

'P: No, they sent up, they sent us up by Roosevelt Lodge. And we were up by Roosevelt Lodge, in the parking lot, sitting on the bus waiting for orders. And the orders didn't come and we just kind of said, "Geez, let's don't call for orders." And we sat there virtually all day long. In the late afternoon we got out and we loaded up helicopter loads of irrigation pipe that were to be set up from a reservoir to the west of the Roosevelt Lodge, all the way down to Roosevelt Lodge and then they were going to sprinkle with this irrigation pipe.

)P: How did they make a helicopter load of irrigation pipe?

'P: It was interesting. It took two of these rope nets. You set your pipe up, then you put the rope net on the end and you tie the rope nets together and then, forming a triangle with the rope, you hook on to both ends of the pipe and then up to a central triangle point. That that's how we set that up.

On September 5, all these deadbeats were coming to the fire and getting jobs. And one of em was a guy who had just been let out of prison. I can't remember what his name was.

)P: Were they on crews or were they just a . . .

JP: Individuals. They come there . . . .

)P: Were they contractors or were they, they weren't actually.

JP: Some, no they weren't hooked up to crews, but they were contracted, like they would drive pickup trucks, they'd say, "Hey, I've got a pickup truck, I'll drive." These deadbeats would come. Well, one of the guys had just gotten out of prison. And he had a little pickup truck, and he told them he had experience with a chain saw. Maybe he sawed one log once. But they gave him a chain saw and they sent him out. And they had one of our crews swamping for another. "Swamp" means to push on the tree to pull the branches out of the way, to help the sawyer generally. And the ex-convict was using this chain saw, and he turned around toward his swamper with the chain saw in his hand, going, and chewed his shirt up. All the way down to his underwear. And just barely scratched his belly. This is a guy just barely out of the penitentiary with a chain saw.

)P: Did the swamper work with that guy again?

JP: No, the swamper never did. In fact it really, it scared the swamper half to death. He, he was psychologically wounded.

)P: Oh, scared half to death.

JP: Yeah. He was like, "I don't want to be on the fire any more, I am ready to go home."

Now, you want to know about emotions, a lot of people . . . .

[TAPE INTERRUPTED]

JP: Ok, I just told you about a guy on the fire who was swamping for a convict. The convict turned with the chain saw going and chewed up the front of his shirt, across his breast, all the way to his shirt, tore it to shreds, through his cotton t-shirt and into his undershirt and even scratched his chest. Didn't cut it bad, but scratched it.

[TAPE INTERRUPTED]

JP: There were people who would have good days and bad days. Some people would respond like a hypochondriac. A person who is sick all the time. Like, I told you about this Tim Catlin, he was always sick. The conditions were horiffic. I wonder, though, if some of it were, some of his sickness wasn't induced by his psychological state of mind. When you

were sick, you could take a day off of the line and stay in camp and still get eight hours of pay. Now, nobody wanted to do that because you didn't get hazard pay and you didn't get overtime. You didn't earn the big dollars. But Tim took sick leave all the time. That was one response to the stress. But there was a lot of wear and tear psychologically on these firefighters. There's a rule in BIFC, which is this Boise Interagency Fire Center, that category one crews, that's the hot shots, should not be out for more than 21 days at a time. Category two teams, which is what we were, shouldn't be out for more than 14 days at a time. So there is a rule that we shouldn't be out more than 14 days at a time. But we were out for 37 days.

DP: At a time, or . . . ?

JP: That doesn't mean between R&R, that means on any incident. A crew should not be there for more than 21 days. And our kind of crew shouldn't be there for more than 14 days. And we were there for 37 and, and by the time I got home I just ached to not be under that kind of stress.

Well, let's see, what can I tell you? Oh, . . . ok, on September 6th, there was a change in policy. Overhead basically gave up. And they pulled everybody off and we did what's called structure protection. We sat around hotels and lodges and buildings and protected them. Our job to maintain this housing for seasonal workers that was owned by TW Services. It was by Canyon Village, an old ratty housing that probably the best favor any one could do was burn it down. But we protected them. All day long on the 6th we sat around playing cards protecting this housing. I have in my notes, I said, "Today we sat doing structure protection." And then I say in parenthesis, "Playing cards." All day. This was a holiday.

DP: Yeah.

JP: This is Labor Day, though, right? Isn't it?

DP: Let's see, on the 6th? Is that Labor Day?

JP: I have here. No I think that was on the 5th and we got holiday pay on that day.

DP: Oh, ok.

JP: In the afternoon we got up off our big duffs and stopped playing cards and removed what are called ladder fuels. Those are the branches which come off of a tree down toward the ground. That makes it so a fire cannot crown into the top of a tree. All the trees that were interspersed in this housing we limbed off as far as we could reach with a pulaski so that there weren't any limbs on them up until about eight feet high. And we did that.

On the 7th we stood by in the housing and waited all day long. We played card all day long. This is where I learned to play Gin. It was a lot of laughs.

But on the day, on the 8th, no wait, ok, the 7th was a important day. I've got an incident to tell you about. We . . . at Canyon Village there is a road that heads due south, there is a junction there where there is a gas station and a road that heads due south. We were between the housing and that road sitting watching as the fire approached. And we saw the wall of fire approach. The water cannons all around us started up and started wetting down the structures. The foam units were spreading foam all over tarnation. And we watched this fire approach. Well there is a big grassy flat out to the west of us. We saw the fire come, the wind was whipping, we saw it come running across that flat probably going 15 or 20 miles an hour, across that flat. There was a bunch of trees on either side of the road. A grove of trees that, kind of, the road went

right through. And the fire came up and got into the grove of trees on the opposite side of the road from us and started to crown out and got really hot. Well, about the time that it crowned out a tourist in an RV towing a pickup truck, a small pickup truck, this huge, long RV towing a pickup truck, drove up and drove right up beside of this crowning fire in this grove of trees and stopped. This old guy, about sixty-five, bald and wearing shorts, knobby knees. I couldn't believe tourists were in there. But . . . and nobody had stopped him. He drove up there and parked, he panicked and stopped right there. And he would not go through this grove of trees that was crowning out. It became obvious that the fire was going to burn up his unit. Burn up his RV. So, he put the RV in reverse and backed it up but that pickup truck that he was pulling jackknifed, that pickup truck he was towing, and so he got his wife out. She looked to be this flustered old hen. She got out, and unhitched this pickup truck and backed it off of the RV and then they backed that RV up just seconds before it crowned across the road. It would have burned that thing to a cinder.

)P: What about the truck? Did it burn to a cinder?

JP: No. See now, you have to understand the geography of this. The RV pulled up and stopped right at the beginning point of the grove of trees that was crowning out. Not all the way into the grove but right as the grove began. So that the truck that was on the back of the RV was outside of the grove. The RV was in the grove. In this burning grove of trees. And the tourists unhitched this truck, and we all waited breathlessly, waiting, watching and waiting for this thing about a quarter of a mile away from us. We were sure it was going to go up in flames. And that would be one of the things that the Park would have to pay for, this guy's RV. A huge thing, one of these sixty or seventy thousand dollar RVs.

There's an anecdote for you to put in a section on tourists in the fire. There were tourists all over the place and we were always answering their questions. And always driving them out of areas that were just about to be torched over.

)P: Tell me what you, tell me. . . there's one anecdote, what about, what about, what were some other experiences?

JP: Well, all the time when we were on roads, we'd be walking to an new area let's say. We always looked like we were black, soot was all over us, sweat streaks were down our faces, and we looked ugly. And these tourists would come by and look at us with this kind of whimsical admiration, like, "Our heroes." And so we'd kind of gloat with the praise, but on the other hand they were always in the way. Whenever there would be a huge fire and we would need to be in there, you'd see some guy up there with a camera. And usually he had bermuda shorts on. And it was just kind of irritating. And from my, this is my opinion, but I think for a good deal of these fire storms the Park should have been closed down completely. Now I imagine the reason this old guy was in there was that they had probably closed the Park off, but he'd been in there and they hadn't run him off. You know. I just think that there needed to be more separation of the tourists. They shouldn't have been in there. You know, I think that would have been a classic way to kill somebody.

)P: Ha.

JP: Or else burn somebody's RV up. Well, let's see. Hum. I'm trying to decide were we are now. September 8th?

)P: Yeah.

JP: Are you getting tired of this?

No, no. I'm watching the golf. I'm paying attention, though.

Ok. September 8th. My notes say, "We cut a line up over a rocky hill side into a grassy meadow. We laid a hose along the line and at 6 p.m. we went down the canyon and back burned along a hand line along the approaching fire." Oh, I'm remembering where this was. This was up again towards Dunraven Pass. There is a camp ground, let me see if I can help you find it on your map. There is a concession stand along the road a few miles on the, a few miles down from Dunraven Pass. And right at that concession stand there is a road that cuts to the west and in there is a camp ground. Now we mopped up along that camp ground. We went up there, above that camp ground, and mopped up a little bit and then later went in and cut a fire line. The fire was approaching us from the south. We cut a fire line and back burned, and started to back burn about 6 p.m. and the fire burned beautifully toward the approaching fire. I thought this was on September 8th, very optimistically that now we would have a back burn that was going to work. It was a clean back burn, it was burning perfectly, the fire line was approaching us, we saw the back burn that we made bump into the fire line and the fire went out. And we went home that night. And we were so happy because we had cut a line and we had back burned and by golly we'd stopped it.

Now that was something, you talk about emotions. It is very important for a firefighter to feel like he is doing something that's worthwhile. We had been up there for three weeks, busting our butts, and at the same time not getting anything accomplished in terms of fighting the fire. The morale of doing that for weeks, for days and days and days, is not good. And ah, and here we finally had an experience which we felt like it worked.

Well, the next day, we got another surprise R&R and we went to Livingston. We, they wouldn't let us have overnight R&R. They just let us have R&R during the day. So we left early in the morning and went to Livingston, Montana, shopped a little bit. I bought a little present for Katie whose birthday was coming up and went to a bar outside of Livingston called the ". . . Hot Springs". What hot springs? I forget what the name of the hot springs was. It's a bar and hot springs outside of . . .

I've seen it I can't remember what it's name is.

Chiko Hot Springs. That's what it's called. There were two crews already there from another fire. Now you've got to get this. Because it is good for the emotions of a firefighter. There were two crews already there so there were sixty firefighters in this bar. And a live band came in about seven o'clock at night. We were supposed to be heading back to camp. We said, "We'll get there before midnight. We'll leave about ten-thirty." The live band came in. There were very few women. All these men and we had all cut off our No-mex pants and gone swimming in these hot springs.

Those green pants?

We cut them off. So we were all in there in cut off green pants. Most of us without our shirts on. Sitting around. Most of 'em drinking Harvey Wall Bangers and ah, gin and tonics, everybody getting drunk, in this cowboy bar, and this cowboy band came in and started to play. And everybody started beating on the tables and tapping their feet to the band. And pretty quick two of the firefighters got up and started dancin' with each other. Rock and roll dances to this punchy western band. They, I remember, there were these sweaty, fat, both of them were sweaty and fat, rolly-poly bear men with beards, wearing their No-mex in this subdued

lighted bar dancing with one another. Before I knew it all the people in the bar were up dancing with each other. All these sixty firefighters dancing with each other. We were all sweaty, most of them were drunk, the country western band was a little chagrined, but they kept playing "Your Cheatin Heart." But all these firefighters were just, were just losing their minds. I think it was a stress response. It was the most, largest, near riot hilarity, that I had ever seen. And, ah, about eleven o'clock we finally pulled out of there. Because we were all in enjoying it, everybody was drunk. We pulled out of there. And you got to remember that this night is September 8. It's the night that Mammoth Springs nearly burned down. We drove back and we had to go through Mammoth Springs, and the road was closed. And they stopped us at Mammoth and we slept on the stupid bus. They wouldn't let us go back to camp. And there was talk that our camp was going to get burned over, too, and the equipment was going to be gone when we got there. So we slept on the bus. The next morning, we ate breakfast and we went back to camp and went back on the fire line.

)P: Now, where was your camp at this point?

JP: It was still at Canyon Village.

)P: Yeah.

JP: We couldn't get back that night because of the fire storm. I remember vividly a fire storm at night. It is a sight you would not believe. The fire line at a distance of ten miles is like a long iridescent worm that flares out bright and then dies away and flares out again. But it is a definite line. Those flame lengths at night aren't as high at night as they are in the day, but they are still quite high. That was a big fire storm that night.

)P: Have you heard about it?

JP: It was a big, big fire storm. Dang near burned Mammoth down. And we were there on the bus. You see, they wouldn't let us get off the bus because they were afraid they were going to have to start that bus up and evacuate us right away.

But the next day, on the 9th, we went back and ah, let's see I guess it was September 9th that we were on R&R. It was September 10th that we got back to camp and ah, I say in my notes, "September 10, hauled burned hoses and melted pumps." Now, this is important, you know the morale of, the morale problems of feeling like you aren't successful. We had that one experience at that one place that I told you about, of having a back burn that looked like it was going to work. The morning that we got back, that fire storm had jumped the fire over that line. And the hose, we had laid a hose line in there to support our back burn, all of our hoses were burned up and there were two, what are called Mark V, Mark IV pumps, they were down, they were down at a creek, and they were pumping water a mile up over this hill. And it had, it, the fire had gone through there and melted them. It had burned everything, it was a hot, hot fire. There's a thing called a hose clamp made out of an alloy, and we found one on a rock, dripping over the rock, melted. It was completely melted over the rock. There were five gallon gas cans sitting there a had bloated out like round balloons, and all the gas had burned out of the middle of them. And, ah, in fact I have in my tool box over here the crescent wrench that is burned. It's just a black crescent wrench. But we hauled out these things. This was this place we thought had been so successful. The fire come through there and not only had it burned everything, it had burned so hot that it had melted all the equipment. All the hose

fittings, all the tools, all the. . . people had left pulaskis, and shovels, and everything in there and you could see these remnants of firefighting tools. The fire had just chased everybody out where we thought we'd been so damn successful. So you talk about morale, where, . . .

)P: Was there any scapegoats as far as, like, such and such a manager, maybe a management team, or would it be the line officers, or would it just be policy . . .

JP: Yes there was.

)P: Tell me about that.

JP: You want some names? I'd better give you a name. The name is Vladimir. He's a Russian emigrant to the United States. His mother was. He speaks Russian. He was our strike team leader. Now remember we came out with two hand crews. He was our strike team leader. He was a skinny guy who was getting a Ph.d in Christian Philosophy at Oxford during the year; during the summers he'd do seasonal work as a firefighter. He was absolutely useless. Carried a radio around and was supposed to be giving commands and keeping us lined out. But he was useless as a leader, he was useless as a worker. He didn't work, he didn't lead. All he did was hang around and give us advice that we didn't need. Ah, but he was kind of a scapegoat. And not only that, he was moody. And he knew we all thought that he was a dink, and so what he'd do was sometimes he would try to be buddy up to us. Like one time he took us into west Yellowstone and bought us pizza on a fire credit card. He would buddy up to us and then other times he would withdraw and sulk. He would, I remember he would sit on almost in a fetal position. With his knees tucked up, hugging his knees, and sulk because nobody liked him. He had another problem: He fell in love with this girl on our crew who was a preacher's daughter from Escalante. She was a Baptist preacher's daughter. Her name was Linda. She was virginal as the day is long. She'd never been kissed she told us once. She was like Dorothy in the Wizard of Oz with her hair in plaited braids. And this old fart, he was 42 years old, skinny, pocked face with this kind of a student's goatee beard, fell in love with her. And chased her around and would dazzle her at, ah, at the fire cafeteria with his social skills. We would all stand back and just laugh at him. Yeah, we did have a scapegoat, it was, it was Vladimir. Ah, everybody thought he was a dink and ostracized him.

DP: Now, talk about, talk about policy a little bit about what you were telling me as you were driving the car. As far as that goes.

JP: Ok, policy. On one afternoon, early in my experience in Yellowstone, it would have been August 12th or 13th. A few days into it, we sat in a canyon and looked across at a fire that was, that was burning itself out. We had been gridding, we had been looking for spot fires, where the fire had jumped the line, all day and had found maybe one little tiny spot fire. And the rest of the time we had just been walking back and forth, what we thought was just plain wasting our time. At that point we felt like we were caught between two opposing philosophies. The "let burn" philosophy suggested that we should not become too aggressively involved in fighting the fire. On the other hand, the "let's save Yellowstone from the ravages of fire" philosophy suggested that we should just jump right in there and put it out. So we felt like we were neither aggressively fighting the fire nor retreating from the fire. We were in a state of limbo between the two. We couldn't either get in there and put it out when we had the upper hand nor could we just leave it altogether. To us

it seemed like we should do either one or the other because we were wasting our effort and our time, we were working incredibly hard, but we weren't, we weren't in there, at that point, we weren't in there aggressively fighting the fire, nor were we pulling back from it. We felt like, ah, there is an old saying that we used, the guy said, ah, "Well I feel we should either shit or get off the pot." And ah, that's the way we felt. We should either shit or get off the pot. But that was early in the fire, Dave. That was before that first blow up about August 13th, 14th, or 15th, that big fire storm that pushed it over a hundred thousand acres. After that, we felt like not only were we fighting it as aggressively as we could but that we were getting our butts kicked at it. So, there were those two emotions. Early on we felt like we were caught between two philosophical approaches to the fire and later we felt like regardless of the philosophical approaches to the fire, the fire was beating us. And then our morale started to go down because nothing that we did, no matter how hard we worked, ah, would work. Nothing. It was as though we weren't even there. The fire did whatever it damn well wanted to. And we were coming out like ants around the legs of an elephant. Trying to stop the elephant from going in one direction or the other. Just unable to do it.

DP: Ok. How close were you to going home here in our chronology?

JP: Well, let's see, we're. . .

DP: September 10th, are we?

JP: Yeah, September 10th is the day we hauled the melted, ah, the melted pumps out. That place we were sure that we had saved and then we come back after our R&R and find out that we had to haul out melted pumps. Shot our . . .

September 11th, we went home on the 15th. On September 11th we hauled more burnt hoses out of that area. We were, we were really down. Ah, let's see what we got here. My hand writing's bad because I probably wrote it on a bus. "September 11, hauled burnt hoses and mopped up." Ah, "snowed all morning." That was something that was great. We felt like, "Ok, if we can't do it, by damn Mother Nature will." And it snowed all morning. Ah, it was so bad--we were up by the top of Dunraven Pass--it was so bad that we couldn't go down to our camp. We had to drive down to our camp through Mammoth. It took us about 2 1/2 hours to get home, that night.

On the 12th, September 12, we mopped up all day, all day, the same places as yesterday. Now this is the place, the same place where we thought we had been successful. We tried to put things out. We, ah, and here is another highlight for you. Talk about the emotions of one firefighter toward's another group of firefighters. We, a hand crew, were in there mopping up and there were some structure fire people from California who'd come in with these huge engines that were meant to put out structure fires. And, ah, they were coming up there to support us as we mopped up. Well, we'd been mopping up with these hoses and our training is to conserve water. To put out as much fire as you can with as little water because water is precious in the wilderness. You have to haul it for a long distance. These guys, though, their philosophy was "drown the sucker." They had engines with 900 gallon capacities. Now you remember, my engine has 250 gallon capacity. They drove up there and they said, "Do you want us to help you?" And we said, "Sure." They parked their engine, they laid out their hose, in this area, and then one guy stood up there with this hose and a nozzle and another guy stood up

behind him and held his hands to his back so this first guy wouldn't fall over. And they turned on the water, and in three and a half minutes they pumped all 900 gallons. They just baptized that hill, you know, and they didn't put out the hot spots. Fact was, they took burning logs, and the pressure was so high, that they tossed burning logs and embers all over the place and then after their truck was empty having pumped out 900 gallons and knocked hot stuff all over the place, they drove away. And left us there to fight a fire. They made twice as many fires as we had in the first place.

So, these were the structure fire guys. So we mopped up on September 12th, September 13th we waited around in camp all day long. They were trying to demob us, trying to get us gone, and we were bored to death. By this time they were afraid that the camp was going to burn so they moved us down on this day into some dormitories that were there for workers. And we spent the night in these filthy dormitories. The dormitory I was in had, there was one wall was covered with Playboy pinups. And, ah, we stayed in there and played poker. In this environment all day long. And it was just, the boredom was excruciating. Ah, and they were trying to demob us. Hum, they didn't get us demobed. The odd thing was we'd go up in the camp and they'd say, "Oh, you're the Color Country crew. We're working on your demob. Come back in two hours." We'd come back and they'd say, there'd be fewer people there, and they'd say, "We're still working on it, come back in two hours." We'd come back in two hours and there'd be still fewer people there, everybody's moving out, they're closing down the camp, on the 13th and 14th of September.

Finally, late in the afternoon, we went up there and they said, "We still haven't got it." There were only a few people there. The computers were still set up. The secretaries were in. And they said, "You come back at nine o'clock.

[TAPE INTERRUPTED]

JP: Ok. I've been telling you how they kept telling us to come back, the demobing. And every time there were fewer people there. At three, and they say, "Come back at five." We came back at five and nobody was there. We had no transportation, there weren't any trucks, there weren't any buses, nobody else was in those, the whole dorm, the dorm was open but nobody was there and we were just there. We had no way to get out. They completely forgot about us. The, the camp was just, was just chaotic, this chaotic administrative nightmare. This boondoggle of people going places, getting papers signed, packing up boxes, putting things in trucks, and they kept saying, "Come back, come back." And they completely forgot about us and just left us there. Well, half of our crew had been planning to stay. And they went down to Mammoth. I was going to go home to go to school. Well, the next morning it turned out that in Mammoth the half of our crew that was going to stay were told, "You guys got to go home. You've been here for thirty-seven days, this is crap, you're going home. You've had it." And so they put them on a bus and they came back and got us, in Canyon Village. Otherwise, . . .

JP: You'd still be there.

JP: . . . I'd still be up in Canyon Village. You could interview me there. And we came home on a bus. Ah, coming home after thirty-seven days on a fire, I was exhausted. I'd had it. I was absolutely shot. What else can I tell you about it?

JP: Oh, . . .nothing. Ok.

Interviewee: Mark Petroni, Acting District Ranger, Gardiner Ranger District, Gallatin National Forest, Gardiner, Montana.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 16 December 1988

DP: Okay, lets see why don't you say something.
MP: Okay.
DP: Okay that's good. We're here in the Gardiner Ranger District Office with Mark Petroni is that how you say it?
MP: That's correct.
DP: He's graciously met after hours, it is seven o'clock in the P.M. to talk with me today. What I hope to get from you, you were here during the summer is that right?
MP: That's right Dave, I arrived about May 1st on the district and we've been here through the fires and whatever else the drought has brought us.
DP: And you were the acting district ranger over the summer?
MP: I was from August through about the end of October.
DP: I'm interested in the publics interaction with this district ranger office here concerning the fires, would they come here for information or to lodge complaints?
MP: The district has been a center of information for the community. So it was natural for them to come here for fire information. The Gallatin National Forest's involvement started with the Fan fire. The Fan fire threatened Gallatin National Forest lands in early August. The people in the area were who especially concerned with the Fan fire were the residents of Cinnabar Basin and Mulheron Drainage which is owned by Church Universal Triumphant and several other land owners. They used this office as their point source for information. We were making daily contacts at that time with those people. We were also serving as kind of a branch office for the fire management team that was handling the Fan fire. They had a division set up on this side of the mountain that handled logistics, and suppression operations for the northern perimeter of the Fan fire. From August 1 on the local community was using this Gardiner Ranger Station essentially as an information source. And then later on when the Hellroaring fire started on August 15th we established an Incident Command post (ICP) here.
DP: There was actually an Incident Command post here?
MP: With the Hellroaring ICP in our bunkhouse we became a beehive of activity. The local community was then involved. Local vendors were signed up to help support the fire effort. We also had public meetings that continued on a daily basis well into September.
DP: And those meetings would be coordinated out of this district?

MP: Yes. In fact, we had public meetings for the Fan fire, Hellroaring fire, Storm Creek fire and North Fork fire. Public interest peaked in late August and early September when Cooke City, Silver Gate, Mammoth, Jardine and the area around Gardiner was evacuated. Incident Command people from the fires routinely attended the meetings.

DP: How many people would attend these public meetings generally?

MP: I would say probably the average was fifty to sixty. But we had one that there were 300 hundred to 400 hundred.

DP: What happened at that one?

MP: That was when we were talking about evacuating Gardiner and Jardine in early September. The North Fork fire that had blown over the ridge and Mammoth had evacuated. As luck would have it the meeting was called for the same night as a girls basketball game, both at the school, so we ended up with a full house and then some. After that it tapered off to 200 to 300 people per night for three or four nights. That's when we were running daily meetings.

DP: So were evacuation plans actually draw up for Gardiner?

MP: Oh, yes.

DP: And Jardine? Is that right?

MP: Oh, yes. Jardine was evacuated.

DP: Oh, is that right? What agencies did you coordinate with in drawing up those plans, I mean agencies and also private and public . . . ?

MP: My role as the district ranger was to bring the different agencies together to manage the advancing North Fork fire. It was being managed by an Incident Command post at West Yellowstone. When it blew up in early September they gave a portion of the fire to the Mammoth Complex which was handled by an Incident Command team at Mammoth. They managed this end of the fire. When the fire threatened town we took some direct action with involving the county commissioner, the Montana Department of State Lands, the State Disaster and Emergency Services people, and then of course, our local fire department and fire chief. We set up a unified command with Forest Service, the county commissioner, disaster people, State of Montana people, and Dan Sholly as the incident commander in the Park. And then they worked together as a unified body of determining what their strategy would be for handling the structure protection in Gardiner, evacuation of Jardine, and evacuation of Mammoth which had occurred about the same time. Also, the outlying drainages, Mulheron Drainage and Cinnabar Basin were evacuated. Gardiner was placed in pre-evacuation phase. Everybody was getting ready to go, packing their bags.

DP: What was public sentiment like at this point at this point, was it pretty cooperative, were there a lot of high strung feelings or . . . ?

MP: By early September everyone had pretty much accepted the fact that these fires were kicking tail. And there really wasn't anything we could do about stopping them. You know, we had some success by this time Cooke City had already been burned around and we felt like we had a victory, saving the town, we lost a few outlying structures but we did have some luck in herding the fires around communities and the people accepted that. The communities realized the fact that the fire is on the ridge, you could see it from town. The questions of how it got there will be answered later. We're dealing with the fact that the fire is here now and we have to react. The people accepted that.

DP: Where there any private volunteer groups such as like the Lions or Rotary Clubs that took a role in these sort of things or was it mainly governmental?

MP: It was mainly governmental. There really wasn't a whole lot of what I could see as local clubs or organizations rally pitching in. The entire town came together. It wasn't as if it was a disjointed effort at all. This town pulled together and just did what had to be done. They all got ready, there were no questions, no fighting, or animosity whatsoever, at least at that time. Everybody was willing to pitch in and do what had to be done. The next day after the meeting I had people down here begging me for garden hoses. They wanted some hose to protect their structures. We loaned them some hose. We had fifteen or twenty pumps that were staged between here and Jardine. Wherever there was a house we had a pump set up there ready to protect it. We constructed a two blade wide dozer line from Buffalo Point through Deckard Flats which is a very important elk winter range. That line is very visible from town and probably will be for several years. Nobody questioned those Actions. Living in the Yellowstone is like living in a fish bowl. Everybody's looking in, criticizing, and pointing fingers. We did things that had to be done and no one asked any questions. I was very proud to be able to work with this community. They were very supportive. Everybody pulled together and helped.

DP: Great. So, Jardine's about five miles that way is that right?

MP: It's five miles north.

DP: And they actually had to evacuate, how close to fire . . . ?

MP: It never really got close. The problem we had with Jardine which was the same with Mulheron and Cinnabar were that they were essentially isolated with one way in and one way out. If the fire threatened those areas we would be moving in with fire apparatus at the same time the people would be evacuating. So, it was an effort to get ahead of the game, to get the people out before the fire ever got there. The way the fires were moving in early September there wasn't a person in the house that would bet that it wouldn't have gotten there. Luckily we had a little bit of a weather change that gave us an opportunity to control the areas threatening the communities.

DP: Who made the ultimate decision for an evacuation? Would that be like the county commissioner or would that be, or is it just kind of an informal thing?

MP: There is a formal process. The sheriff and county commissioners made the decision for evacuating private land. We were serving as advisors to the county commissioners and the sheriff. Telling them what we thought the fire was going to do and making recommendations. The evacuation was essentially in their jurisdiction. We went through essential three levels of evacuation. One was pre-advisory where everybody was instructed to get ready. The objective was to be able to have all your things together and out of town in a half hour. The next level was the actually voluntary evacuation. The third level was declaration of martial law that provided for forcible removal if necessary. Jardine and the other drainages were in a voluntary evacuation phase. The people did comply. In Cooke City and Silver Gate we were into a mandatory evacuation, martial law was declared, people were forced out.

DP: How was the flow of information to this ranger district from the Incident Command concerning the Fan Incident and also the North Fork or the Wolf Lake, I believe they called it. Was the flow of information pretty good?

MP: It was excellent. We were tied into common computer connections at the command posts and direct electronic mail capability with Area

Command. Starting with the Fan fire communications were very good. Later on things got more hectic with the advance of the North Fork fire. It seemed like there was a lag time between when the fire was threatening Mammoth and protection was considered for Gardiner and Jardine. We took the initiative and started planning protection on our own. In fact, the Hellroaring fire team developed the initial protection plans for Gardiner and Jardine.

DP: Some of the private land owners that you mentioned up there in Cinnabar Basin and particularly the Church Universal Triumphant were critical of Park fire policy. Did any of that land on this district office, any of that criticism?

MP: There was criticism in how we managed the fires but not so much from those people who were threatened by the fires. In fact, I think they were very supportive of the efforts we took to keep them informed and involved. The people who criticized, generally were not directly affected by the fires. It was difficult to get people to understand the fire behavior associated with 2 percent fuel moistures and 50 mile an hour winds. Ironically I got several phone calls, one from a person in New York who suggested that our fire lines weren't wide enough. I told him that our fire lines at Cooke City were close to 100 feet wide and he suggested that they should be 130. When I pointed out to him that the fires were spotting over a mile ahead of the fronts he just hung up on me. Another caller suggested that we use the air force's bombs and bombers to build fire lines. Actually call for bombing strikes to build fire lines.

DP: They weren't experienced fire people?.

MP: Oh, of course not. They were serious people who offered solutions. Unfortunately, they could not visualize the problem. Basically the general public could not understand the challenge associated with fighting these fires. I'll relate to you an incident that happened during a Fan fire public meeting. I was conducting the public meeting when one of the locals stood up and wanted to know why we weren't putting the fire out. I tried to explain to him in fire behavior terms what the fires were doing and why it was so difficult to put them out. I was about half done when a local outfitter who had been working on the Fan fire for about three weeks stood up and said, "I've been on these fires for three weeks and these people are doing everything humanly possible to stop those fires and if you were all out there looking at them you wouldn't even ask such a dumb question." That statement put the question to rest.

DP: So, at this point you think there amongst at least one individual that there was still some confusion as to what was going on as far as the policy?

MP: There still is. There are a lot of people who come here in the summer and are not representative of the year-long population. They still have questions. And we're going to be answering those questions for a long time. There are locals who are very critical. They still believe we could have put those fires out. But when the chips were down during the evacuations those feelings were set aside.

DP: Where do you think this confusion or misunderstanding stems from?

MP: I think just lack of knowledge, and in some cases lack of trust. These people have lived here along the Park boundaries and have dealt with the Park Service and the Forest Service on a variety of controversial issues. We don't always see eye to eye. We have a public that is willing

to second guess the professionals and some of that surfaced. It helps keep us all honest.

DP: Could you give me the name of some of those key people we were talking about as in the county commissioner and the sheriff here in town and the fire . . . ?

MP: The county commissioner was involved here in town was Jim Hunt. Carlo Cieri, C A R L O C I E R I, was the county commissioner involved with the unified command in Cooke City.

DP: Could you spell that one more time sir.

MP: That's C E I R I. Ceiri.

DP: Okay.

MP: And there both Park County commissioners out of Livingston. The county sheriff is Charlie Johnson and he was involved as a part of the unified command as well.

DP: Okay, now did you mention that there were some fire people?

MP: Bob Kopland, that's, K O P L A N D, is the local fire chief for the volunteer department, he's one of those who was pretty critical about what was going on.

DP: That's a volunteer department.

MP: I'd encourage you to even talk to some of the outfitters who worked the fires.

DP: Okay, could you give me a name of some that you think would be . . . .?

MP: Bill Hoppe. H O P E. And Warren Johnson, they were two that worked on the fires. They started on the Fan fire and worked into October. They saw probably more intense fire behavior than a lot of the firefighters we had here. They were there every day.

DP: Bill lives just up toward Jardine?

MP: Exactly.

DP: Okay. Great. Are there any general impressions that you've had over the summer that you think you'd like to share as far as experiences or anything? Just an open ended question.

MP: I think probably the one real positive thing that came out of the whole summer event, was the cooperation between the agencies and the way that it pulled these communities together. Everyone was out there willing to help, and not get in the way and not question what was going on. Even a small district office like this pulled together as a unit. There was essentially a third of this district's acreage burned. It was the biggest show in town and everybody dedicated themselves to do one job and that was to manage those fires. There really wasn't anything else we could do. It was a really trying, stressful time for the people who work here and as well as these outfitters who have lived and worked in that wilderness back there where 107,000 acres of their playground burned. I have an employee who has nearly 30 years of tenure on this district. It was hard for him to watch the acres burn and to lose a cabin he had just rebuilt. It was a really hard time for everybody when things literally went to hell. But they laid down all their gripes and personal problems to save the rest of the cabins and manage those fires. It was the spirit of cooperation that really stands out in my mind. When the first fire teams came here, there were very little resources available to them. They just had a heck of a time getting organized and getting going because of the firefighting effort going on elsewhere in the country. We did everything we possibly could here in this office to facilitate their efforts. One of the radio operators, a Forest Service employee, was so taken by the way we helped

that she sent us her per diem check. She sent fifty dollars as a thank you. Of course we returned it. That's just an example of friendships we developed throughout the summer. It was just a good team effort with the more than 1,500 outsiders brought into fight the fires.

There was controversy too. We instituted a meal ticket system that allowed firefighters the option to eat where they chose. Every restaurant in town was included in the system. All things not being equal, people picked the spots where they could get the best meal for their money. Some establishments didn't have good service or good food. One restaurant mistreated the firefighters one day and nobody came back the next. Of course, the manager came in to talk to me. I told him that people were complaining about his food and service. Compared to everything that was happening these incidents were very minor. It really isn't worth a lot of attention. I know we gave this community a shot in the arm financially. In fact, we just got the figures, federal money paid to businesses or people with a Gardiner address, not including Forest Service employees, was close to a million dollars.

DP: Close to a million dollars?

MP: Yes, about $990,000.

DP: So economically it hasn't been that hard on Gardiner?

MP: I don't know what the norm would have been with tourist but I can't believe that we didn't offset that from early August through October when basically we were taking up every chair in the cafes.

DP: Well, great, thanks for coming here tonight. I appreciate you going out, it makes it easier for me to schedule things on a busy trip.

MP: Oh, no problem. Are you looking at just kind of how the . . . ?

DP: I'm looking at the agency and how they react with the community and latter on I'll try to get some community reaction to it, and also how they reacted to the fires, let's not forget.

MP: Oh, of course.

DP: Maybe you could comment on that too, is just how was it living in the shadow of I spent a day or two here in Gardiner this summer. Quite frankly it was very smoky, how was that for you personally and do you think was it stressful for people?

MP: I think it was stressful for everybody. We had monitors here. We were monitoring particulate levels, and disseminating that information. People were calling here to see if they should be breathing or not. Any time people can't see the sun, it has a psychological effect on them. Especially when there's a threat of fire along with the poor visibility. It was stressful for me, for all of us for that matter. We were working sixteen to eighteen hour days with the smoke causing sore throats and runny noses. I have three little boys that stayed indoors when the smoke was especially bad. It was hard on everybody in town for that matter. The school suspended recesses and several children with respiratory problems were sent to stay with relatives out of the area.

Interviewee: Pat Sheehan, Director, Information Office, Intermountain Region, U.S. Forest Service, Ogden, Utah.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 28 June 1989

DP: We are here today with Pat Sheehan in the information office of Region 4. It is June the 28th and approximately 9:30 in the morning. Pat is the director of information here in the region and he has consented to talk to us about last year's event in the Greater Yellowstone Area and also the information office's role during the fires.

First off, Pat, give me a brief chronicle of the history of information office in the Forest Service and its purposes and its and its mission.

PS: Ok, there really are a number of specific purposes, but the information function that has evolved over the years from one of what we used to call Information and Education, I & E, to now one where we try more to involve our publics in the decision process. So we do more education and informing and involving than we did historically. But, one of the keys is, I think, is bringing to the publics that we deal with, both internally and external, the important events that are that are going on in the Forest Service, sharing information, if you will, about what is happening and some rationale as to why it's happening. And we generally accomplish that function through our contacts with the news media. We serve as the focal point for the regional office here and fielding media inquiries and requests and so on. We also have a very active arm of education and this takes several forms. One of interpretation of what is going on at the field level, another is working with teachers and others to identify processes whereby their students may better understand the environment and what it is all about.

So, basically, in a nut shell, our function is 1) of informing and sharing information and 2) education and an offshoot of that really is the public involvement, involving our publics in our decision processes. That has evolved over a period of, I guess ever since the agency was born. We do have a mission in the Organic Act that states our need to share information. This is in the Department of Agriculture's authorization bill as well as the Forest Service, in terms of policy and regulation.

DP: I was reading in Tom Alexander's Regional History about Regional Forester Stan Tixier's efforts in improving the role of information in '85, or '86. Could you comment on that?

PS: Sure. What that was, Dave, that was really a sensing effort that we undertook to find out how well we were communicating with our publics. And what it involved was a informal survey, informal discussions with a

broad cross section of our publics to determine if in fact we were effective in our communication role. Stan headed our effort up. It was called the "Communication Awareness Project" and it was completed in 1985. And from that we drew a number of conclusions about the ways we communicate with our publics. And basically we felt that we needed to shore up and strengthen our areas in communications to a great degree. But there were, as I recall, eighteen conclusions and recommendations that resulted from that study.

DP: Ok. Tell me about fire education through the years, the Smokey the Bear program and then this transition in policy and how that affected the fire aspect of the information effort.

PS: Sure. The Smokey Bear program was born in about 1945. And this was, of course, right at the conclusion of World War II when natural resources were at a high premium because of the need for wood and the building programs that came after the conclusion of the war. So there was a general concern that fire prevention was a very important part of natural resource management. And Smokey Bear came along at a time when we needed to communicate and help educate the public to the dangers of fire and the destructive forces of fire. And many young people, including, I suspect yourself, Dave, grew up with Smokey Bear as the symbol of fire prevention. There is a very strong signal sent out by Smokey that fire was bad, wildfire in the woods was bad. Along about 1965, 1966 in that era, we saw a movement, a change in thinking that allowed for prescribed fire in the forest. And there had been a prescribed fire program underway in the south for many years, many of the southern states. And also that prescribed fire philosophy was gaining support throughout the agency in general in all the various regions. The conflict we ran into was trying to, what should I say, alter the public's thinking that some fire was good, because Smokey had done such a tremendous job of indicating that all fire quote, "was bad." And there were no exceptions to that. We had maintained all the way along that Smokey's message is still vital, it is still viable in what Smokey has said is that "uncontrolled wildfire is bad." And to this day that is still a very viable message, a very viable signal that we want to send to our publics. Where we ran into the conflict was attempting somehow to weave the prescribed fire message into Smokey's overall theme and do that in such a way that we weren't confusing the public. And, you know, very basic to that would be the distinction between why is some fire good and why is some fire bad. So the Smokey Bear program did address that issue when I was a part of it in Washington, clear back in 1969, 1970. And, the general thrust of Smokey though has remained that wildfire is bad and we have not really attempted to make a major distinction with Smokey in trying to educate the public as to what prescribed fire is and what natural fire is versus wildfire. So, Smokey's message, I guess, has remained fairly consistent over the years but where the problem area has arisen is the contradictory kind of ah, what should I say, the way the public is receiving that message and trying to sort out what fire is good and what fire is bad. But in terms of Smokey, there never really has been much modification of his basic thrust, and that is that wildfire is bad.

DP: Could you talk about the problem of communicating the niceties of how fire can be on one hand good and on the other hand bad. Some of the people I talked with in the Park noted that was a very tricky thing to communicate. They got caught in a "catch 22" by on one hand explaining the ecological role of fire and on the other hand expressing that there

were actually going full force ahead in suppressing these fires with everything they had. Would you comment on that? Did the Forest Service encounter an analogous problem?

PS: Well, I think, Dave, over the years since our prescribed fire policy evolved in about 1977 era, we have had a very difficult time in trying to explain and inform and educate, if you will, our various publics about what prescribed fire really is. We've made a number of attempts to do that as we've developed fire management plans, we've attempted to involve the publics in that process. But it has been a very difficult concept to carry across to the public. I think there are a number of reasons for that. The general public, as we found out last summer, and we will talk more about that later, normally does not get interested in issues such as prescribed fire versus controlled fire until the actual incident is before them on their television screens or they are reading about it in the newspapers. But during the periods of time when it's calm and there's is no fires burning, the ability to interest the general public in prescribed fire concerns is a very difficult task at best to deal with. And that is true with a lot of natural resource issues that we deal with. Until they are on the "front burner" public concern generally is very low. So beginning in about 1978, we did have an on-going effort in this region and Forest Service wide to try to develop some understanding for what prescribed fire really is, what it means, what the implications are. But except for a very few specialized kinds of publics, we were not very successful in raising public's level of awareness as to what this thing's all about.

We had a classic example of that in 1979's fire season in Idaho where a prescribed fire was allowed to burn for a number of days and then all of a sudden, on a very dry windy day, it took off and escaped the prescribed area, the prescription area, escaped prescription and burned about thirty some thousand acres on the Targhee Forest. And we caught a lot of concern, public concern, about allowing that fire to burn in the first place and what our policies really were, etc., etc. I think there is a very distinct parallel between what happened last summer and what happened in the 1979 season, and what happened in seasons in between that. And that is, that as long as the fires are generally confined to a forested or a range area where there is very little threat to public safety and health and well being, and no threat to structures, facilities, and so on, the public generally remains either very apathetic or unconcerned about that fire situation. In other words, if it is out of sight, it is out of mind. What we saw happen this past year, though, is the fires escalated and posed a threat to communities and forced evacuations and actually burned structures, and what have you, then it became a very real public issue. And the public then, at that point, I think, was searching for answers as to why, what is this natural fire prescribed fire policy that's been ongoing for years and what's it really mean, what's it really all about? And, of course, there was a lot of second guessing and questioning of that policy and how valid it was. We saw that very clearly in '79 in Idaho. We saw it again in 1986 in Idaho, 1985-86 where we had some prescribed fires in wilderness that did escape prescription, posed threats to to either communities, facilities, health and safety of individuals, and also put out a lot of smoke that even in communities many miles away was perceived as a very negative thing. And that is understandable. So, what I am trying to say, Dave, is that until the incident is on the front burner generally there is very little interest, very little motivation for

people to become involved and understand what fire policies are. And this was a big factor, I think, in the '88 fire season. With a lot of questions being raised, people becoming aware for the first time that there was such a thing as a prescribed fire, a natural fire policy, and of course, this escalated with the high level of media interest in the Yellowstone area fires.

)P: Ok. Why don't you move into the events of last summer from an information outlook and address some of the things you have been talking about--policy, and you mentioned publics, maybe you could, while you are talking about the events of last summer talk about the different publics that the Forest Service and the information office deals with.

?S: Just in the way of a little background, the Incident Command System that we work under does provide for what we call information officers to become an established part of each team. So, as an incident team is dispatched to a fire they normally, and this is true in most regions, it isn't true in every instance, but in most cases, they will have an information officer assigned to that team. The role that we play here in the regional office is to assure that individual is properly trained, has the necessary skills and background to function as a part of that Incident Command team. So last summer as the fire began to escalate and we saw our Incident Command team dispatched to deal with large project type fires, along with that team went an information officer. We did see last summer some very new innovations in information types of activities on a fire. We saw, for example, on the Mink Creek fire which occurred in early July and burned on through the entire summer period, the use of video for example as a way of trying to gain public understanding and specialize publics, elected officials and others, had the opportunity to see on video almost on a daily basis what the fire situation was, to see very graphically what was happening. So that was quite a major breakthrough in terms of our information sharing role with the public. And Ed Waldapfel on the, he was information officer on the Sawtooth Forest, was very instrumental in making that happen in cooperation with a lot of other people. Ed was the information officer assigned to the incident team that dealt with the Mink Creek fire. But, going back a little bit to how those folks operate, the information officer reports directly to the incident commander. Of course, the incident commander does work and take his direction from the forest supervisor. So the way the information role unfolds on a given project fire is a combination of the forest supervisor's direction to the incident commander, a combination of standing policies regarding information types of activities that would apply broadly to the Forest Service and the region, and probably more importantly a detailed day by day, what should I say, interpretation of current events so that public information program evolves to respond to media interest, to special events that occur or special circumstances on a given fire.

As an example, the Mink Creek fire last summer, one of the early fires, was highly inaccessible. We had a lot of problems trying to access it for firefighting purposes as well as media access. And, of course, the media is very much interested in large project fires, particularly the first one of the season. So, we did experience some policy questions regarding media access to a fire that was generally inaccessible. Those were worked out, but those were some of the kinds of situations that faced both the information officer and the incident commander, and the forest supervisor who all work together to deal with that. So the Incident

Command System does provide for information types of people to be assigned when the information officer and the incident commander find that the number of staff available on that fire are not adequate to deal with all the needs, they have the prerogative of ordering additional people, which normally does happen. How many and types of skills vary with the individual fire situation. But throughout the summer we also found that because of the number of incidents, the number of fires underway, that we in fact ran short of what we considered to be fully qualified information officer people to serve on those fires. And, what was happening was that we had less than qualified people available to do the job. And this led, I think perhaps to some of the problems that we encountered with the public understanding what was going on. But it was totally a situation where you make do the best that you have available at that point in time. Which is what it came down to in a lot of other areas, not just information about the fires.

DP: As far as a direct role, did the regional office have a direct media contact with either fires in the Greater Yellowstone Area or other areas in the region?

PS: Yeah, the role of the regional office, generally, is something like this. The day to day contact with the news media in terms of gathering information about a specific incident is relegated to the information officer on the fire or the public affairs officer on the national forest involved. For example in Jackson, Fred Kingwell is the public affairs officer and Fred worked closely with the incident team, Ed Waldapfel and his crew, in assuring that information needs were met. So normally our role, again, is to provide qualified, skilled people to fill those team positions. Where we would become involved directly would be in a situation where there's region-wide interest, in other words, there are multiple incidents going on and we would serve as a focal point for providing information of a broader nature. But our role is normally not directly involved with contact with the media unless there are special concerns or incidents or policy questions that the media feels they are not being adequately answered. Or if they have a need, for example, to talk to a top line officer in the region, such as a region forester about a policy question, they will come to us. Normally though the media is smart enough and astute enough to go right to the source, the best source of information, which is usually at the very local level.

Where we did become involved last summer though was during the establishment of the Area Command at West Yellowstone, the Greater Yellowstone Area Command situation. And the reason we became involved there was that Area Command, particularly the information functions, are not very common. And so during the initial stage of that we played a role in attempting to organize the information function providing an assistance role to the area commanders who subsequently were assigned to West Yellowstone. And our role there was purely advisory. We did not actually staff the information office, but we rather advised the area commanders as to how they might best be run. Now after the initial Area Command was set up in the latter part of July, that became rather routine. It was just a matter of staff turnover, of ordering if you will fresh incident information officers to come in and function. So once that was set up and going we really did not have a very important role in there. Another role we played, in the Yellowstone area especially, was interacting with the Yellowstone Team Leader who was Jack Troyer, in advising Jack on very specific information types of needs as they unfolded up there. And we

played this role on a number of Yellowstone Coordinating Committee activities, where we provide advice in counsel to the team leader and to the managers.

DP: Why don't you talk about efforts coordination within the GYCC, specifically on information, just generally since the GYCC was formed and later on during the summer.

PS: Right. Well the Great Yellowstone Coordinating Committee has been in place, structured rather loosely, beginning in the late 50s and early 60s. And that particular group of people had been meeting ever since that time. Over the last six or seven years because of the escalated national interest in Yellowstone, the Committee has become more formal in its operations, has taken on some staff to assist the managers of the Great Yellowstone Area in accomplishing their task, their mission and their management responsibilities. And as a part of that escalation of staffing and more formalization of the Committee, the public affairs regional office people have served in kind of an ad hoc role of advising the managers on all aspects of public affairs. And fire fits into that situation just as wolf recovery, or other issues in Yellowstone, would be impacted. In other words, our role became one of providing advice and assistance to the Greater Yellowstone Area managers as a team as a Coordinating Committee. And we fulfilled that role in a number of different ways. So the fire events last summer, as I mentioned, just fell very naturally into that same role. And we provided Jack Troyer and the managers advice on how the public should be dealt with, if you will, how we should share information, where we saw weaknesses we advised the managers and Jack Troyer and the team of our advise on such a situation.

DP: Would you comment on media perception of last year's events, special problems, issues to convey, and also what is the purpose of the information office as far as where it stands with both influencing and sensing public opinion.

PS: Ok. One of the real issues that evolved last summer in public information related to the way events evolved, in the summer. We started off with a number of natural fires, natural burning fires in the parks and prescribed fires as a Forest Service term in some of the surrounding national forest. And this began, oh, during the June period, during early July we had the Mink Creek fire which started as a prescribed fire. It was ignited by lightening but allowed to, to stay within prescription. It did stay within prescription for about three days before it was declared a wildfire and was viewed to be out of prescription.

But we initially, in our contacts with the media, and the kinds of messages we were sharing with the public, indicated that the prescribed fire policy was viable and it was working and was workable, and that under certain conditions, such as we were experiencing, that fire was very beneficial. That it was defined in our prescriptions as beneficial. But as the summer evolved and as the news media provided coverage to the fires, people were seeing day in and day out on their television screens and reading in the paper about the devastating fires of the Yellowstone area. And they were viewing communities being evacuated, they were viewing structures being burned, they were viewing valiant stands being made to save Old Faithful Lodge, and there was a certain element of confusion about why on the one hand the management agencies were saying that fire is good yet they were viewing visually very destructive forces at work. So there's a lot of contradiction in the minds of the public, I am sure, as to what really was going on up there. I am not sure we were

totally successfully in ever gaining understanding of what point in time prescribed fire was no longer a policy being followed, in other words everything that started, everything underway . . . .

[TAPE INTERRUPTED]

I am not sure in the minds our publics that we were ever very successful in making the transition from the prescribed natural fire setting to the full aggressive suppression effort that evolved in the later part of July. And I think there was a lot of confusion. I think some folks were, some publics if you will, or the general public in particular, was under the impression that perhaps we were allowing the wildfires to burn right up to the very end in Yellowstone. As we, as we know, the immense task and the difficulty of trying to control fires of the size that they were in many instances when they were declared wildfires, was almost an impossible task. History, I think, bore us out, that regardless of how many resources of people and equipment we were able to muster to fight the fire, we just simply were not going to be able to control those. But there was a lot of confusion in my mind about the kinds of messages that the public was receiving. And I don't think that was conscious or intentional, but I think that the message on the one hand came across to a lot of publics that we were just accepting and allowing and not attempting to do anything about the fires in the latter part of the summer. And many of our local publics who were threatened in many of the gateway cities to Yellowstone, for example, were seen as being in a great state of despair and distress because these fires were threatening their communities. But I believe there was a continued perception that the Forest Service and Park Service were not attempting to do anything about that. Which is, of course, erroneous because at that in time we had mustered a massive firefighting force with all kinds of resources and equipment to deal with those fires. But the weather conditions and the fuel conditions simply did not allow the agencies to be very affective in fire control. So there was, in my opinion, starting initially in the summer, the message of what's happening is good, it's within prescription, and then all of a sudden a switch in policy whereby, it really wasn't a switch, it was just a determination that the fires were no longer in prescription, we would deal with it, we would attempt to fight them. But I don't think that transition of thinking and policy really came across very accurately, very clearly, and was understood by many of our publics. What we saw happening was a lot of, a lot of sides being taken, so to speak, where some people said "What's happening there is excellent. We need this in terms of regeneration of some aging forests in Yellowstone and the area. It is good for the wildlife habitat and the long-term affects are going to be very positive." And then we had the other side of the coin where people were viewing again the 100 foot flames moving across portions of the Yellowstone area and those people saying, "How could our government allow this to happen? How can we let this happen?" You know, "We're losing wildlife, we're losing structures, we're losing our great heritage of the Yellowstone National Park and the surrounding area." So there were some division of thinking that began to surface later in the summer depending on the source and their understanding of what the situation was. The Park Service and the Forest Service through the Area Command information group up there, I think, attempted to convey the message that "Folks, we are fighting these fires with everything we have. They are wildfires at this point. And we need to deal with them." Yet at the same time convey a message that "What's happening out there in the

long term will be beneficial." But the acceptance of those people who were directly involved in the incidents in terms of threats to their homes, their businesses, and what have you, were tending to be a contradictory message to the publics out there, if you will. So there was, probably in summary, one of the most difficult challenges the information, the fire information people have faced in terms of trying to convey an accurate picture of the situation as it evolved, and what was happening, and at the same time explain what prescribed fire, natural fire policies were, how the Forest Service and the Park Service, use and utilize those policies as a management tool, and there were many, many difficult factors that made the fire information job very difficult last summer. A lot of mixed signals were coming forward, if you will.

P: Was there a difference between the Forest Service fire information effort and the Park Service information effort? And, particularly in the constituencies that they serve?

S: I really don't think so, Dave. Later in the summer, of course, beginning about the third week in July when the Area Command was established in West Yellowstone, we did have a common information effort. And that information effort was under the direction of the Area Command. It was staffed jointly by Park Service/Forest Service personnel. And those people's role were simply to share and to interpret what the management decisions regarding the fires' suppression effort were with the public. For example, our fire information people, Park Service/Forest Service, would sit in on the daily briefings, sit in on the policy sessions, decision making sessions, and their role was simply to accurately describe what the managers were thinking and doing at that point in time. Where the confusion did come in, I think, was a little bit earlier on where each agency was basically handling its own incidents, its own fires. And early on the Park Service, for example, all of the media inquiries were being handled out of the Park directly. And so the Park Service was sharing its natural fire policy with the publics and the Forest Service was doing the same on the fire, for example, south of there. And our policies, although the terminology may be a little different, were basically the same, although we were dealing in wilderness and non-wilderness areas where the Park Service, of course, has a policy that applies basically just to the entire Park, a natural burn policy. So we were dealing with situations in wilderness where prescribed fire is treated perhaps a little differently than it would be outside of wilderness. So I don't think that, I think the answer to your question directly, the Park Service and the Forest Service were basically conveying the same message to the publics after about the third week in July, after the Area Command was established, and it was a joint effort, interagency effort. Prior to that time though, I think there, depending on who you would talk to and the incident under way, there were some subtle variations in the way we were dealing with the fires. And I think that resulted in some public confusion. There is no question in my mind that it did. I don't believe during the course of the summer though that we were ever able to totally overcome those differences in the minds of many of our publics. And I think that was a factor throughout the summer.

P: Did the Park Service and the Forest Service deal with the same constituencies or was one agency more local and the other more national or were they pretty well the same in that respect?

S: Well, I think probably in terms of constituencies, any time Yellowstone Park becomes a newsworthy item, which it did with the fires,

that publics tend to relate to Yellowstone, where, for example, on the Targhee National Forest, how many of our national constituencies and publics have heard of the Targhee National Forest? So the association with Yellowstone National Park and its great historical value to the nation being the first part, people tended to be more interested in what was happening and pick up. I think the media certainly reflected that. The media interest in Yellowstone, just because Yellowstone was what it is, was of a higher intensity than perhaps it would have been if we had just had a series of incidents that were not tied to the Park, per se. Which we did. But a lot of the media interest focused on Yellowstone Park and what was happening in the Park itself. We have a number of constituencies, of course, many of our elected officials were naturally drawn in and were interested in what was happening in Yellowstone Park. And this was simply a reflection that their constituents were expressing to them. As an example, the many, much of the timber in, down timber which had been blown down through a high intensity wind storm the year before in the Mink Creek fires was burning as a part of the Mink Creek fire. And there was some concern there that perhaps we should have very prudently gone in and harvested that timber in the wilderness area. So there was a lot of second guessing going on. And the political elected officials, if you will, were drawn into those arguments and made some statements regarding that situation. But, in terms of constituencies, I would say that we had a national constituency, we had a international constituency, again because of the Yellowstone name and the magic of that name, and we had local constituencies who were more concerned about the immediate impacts to them economically as well as a threat physically to their homes or their businesses in the area. And we had constituencies I think from all levels. It became, in fact, an international kind of an event with constituencies at all levels.

DP: Double question here, Pat. One, what are the major opportunities presented by last summer's fire events. And two, just any general impressions that you have that you feel are appropriate to have recorded.

PS: I think the major opportunities, whenever we have a series of incidents of this magnitude, there is interest developed in natural resource management and particularly focused on our fire management policies. So we now have an opportunity to take advantage of that great awareness and interest to involve our publics in developing sound fire management plans for the natural forest surrounding Yellowstone area, within Yellowstone. One of the things that came out of the Secretary's review, the Secretary of Agriculture and Interior jointly directed a review of last summer's incidents, was the need to more effectively involve our publics in the development of those fire management plans. So our stress and our emphasis as we rewrite those plans and fine tune them and revise them will be to involve our publics in the kinds of decisions that are going to be forthcoming in those plans. The opportunity is the great height of public interest will hopefully allow more public interaction with us. As I pointed out earlier, though, that intensity, that interest level tends to fade very quickly when we actually don't have an incident ongoing. And the folks that tend to become involved are very highly specialized publics, publics, for example, who have a direct interest in the economic considerations or environmental considerations. But the constituency and the scope of the publics involved narrows very quickly when the incident is over and it is gone and it is not on the front page or on the television screens at news time every night. So I

think the opportunity is a good one and how it will manifest itself as we move to develop new plans remains to be seen. The concern I have, again as I mentioned earlier, is that the great bulk of our publics simply have no interest and our challenge is to try to involve as many potentially affected and interested publics as possible. And our posture in that regard is that if people have no interest obviously we cannot bring them to the table to force them to participate. So it does boil down to a much more narrow sector of people who will be involved. And perhaps their views will reflect the broader general public, at least we are hopeful that will be the case.

The summer, I think though in summary, Dave, was a tremendous, was a tremendous challenge to the public affairs, public information people. Probably never in the history, at least in a recent history of the Forest Service, have we mustered the numbers of public affairs people that we did last summer. In my opinion the public affairs activity was handled in a very professional and a very thorough way given the difficult circumstances that we operated under. I am not aware of any direct conflict between the way the Park Service and the Forest Service conducted the public information activity. There were a lot of instances where the media being very aggressive in seeking out stories would talk to various level, organizational level people, for example firefighters, and ask them their opinion on what was happening. And many of them appeared to express an opinion that was contrary to the way the basic fire policy was going. As an example, if you, if you ask a firefighter who had been brought in from California what his opinion was in the way this fire was being handled and this individual had very limited knowledge of the overall strategy and fire policy, he may be critical or express a critical opinion, which is what happened. And, of course, through the ability of the electronic media to bring that forward to a large public audience, that particular individual's opinions may carry a great deal of weight as to what was happening in the area when in fact that person had a very limited knowledge of what was going on. So, we were, we were I guess, attempting to deal with public information from a number of levels through official normally established channels but that was not always possible. And, again, I'm not being critical of the media because I think all of us would do the same thing. They were attempting to cover what was happening from a number of perspectives and sometimes those perspectives would get blown out of proportion. But, overall, I think the media coverage was good. There was some sensationalism. Again, when you have a visual media like television, that is going to happen. And maybe not consciously, or intentionally, but people viewing large areas of fire and devastating fire, tend to draw conclusions that perhaps they wouldn't in reading a more thorough account of what was happening. And we know that much of our news information is gained by the public through the television media and so the impressions of what was happening were perhaps somewhat distorted, if you will, as to what the actual situation was.

I think the debate as to whether what happened last summer was good or bad in terms of its impact on the environment and the natural setting of Yellowstone is ongoing and will continue to be ongoing. There has been a number of research projects undertaken to ascertain the facts of what happened, but that debate will probably continue to evolve over a period of years. And I think this summer we are seeing a great height of interest in Yellowstone and what's happened there. Media inquiries and media desires to visit Yellowstone have increased tremendously, dating,

well, going back as early as February and March of this year. We have a number of international media who have expressed interest to come and see "what's happened to Yellowstone. Is it going to recover?" So I think probably the information job is in effect just beginning. You know, we have really not concluded the information job because the fires have bee suppressed. What we are looking at now is assuring that the follow up coverage tends to be somewhat accurate, that we, that we facilitate media coverage of what's really going on in Yellowstone and the surrounding areas this year. So the big challenge we have as public affairs people now is perhaps outside of the Incident Command System but still a very real one in the way public affairs is conducted through both agencies, Park Service and Forest Service. And we do have an opportunity now, I think, to share with the publics in a more rational, calm setting, what really happened last summer from a truly public affairs perspective. We can, we can bring forth, we think, a very accurate picture in a different setting, realizing that we're not going to have prime time coverage every night to make that happen. So we have to, perhaps, be a little more selective and a little more aggressive in making sure that the coverage is accurate and objective.

DP: Ok. Any personal impressions?

PS: Well, the personal impressions, I guess Dave, were that again I think our folks performed in a very outstanding way. By our folks I mean public affairs folks last summer. And certainly if we had to do it over again I think we would have perhaps done some things differently. I think we would have made a stronger attempt at trying to up front explain prescribed natural fire policy and gain some understanding of that. But other than that I really think that yeoman work was accomplished. I feel good about what happened, but that doesn't mean that we don't need to improve, continue to improve, fine tune and sharpen our skills.

DP: Ok, well thanks Pat.

Interviewee: Dan Sholly, Chief Ranger, Yellowstone National Park, Mammoth, Wyoming.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 15 December 1988

DP: I'll just put a tag on the tape and say that I'm here in Dan Sholly's office.

DS: Is that music bothering you?

DP: No, no problem. And its December the 15th and he's been gracious enough to let me talk with him. Okay. One of the stipulations of my contract to do this history is to talk about agency policy, decisions guiding fire control and management strategies as events progressed. But with all the technical reports out, I'm probably more after the, maybe the human side and also to get at the coordination effort. Let me start with the question of when was the decision or how was the decision made to bring in Incident Command teams to deal with the fire situation?

DS: When the size and complexity of the fire situation exceeded what we felt was our local capabilities, recognizing that the rest of the Park was at a full operation tilt in its busiest season.

DP: Can you remember when that came about?

DS: Well, we established our own Incident Command team on the night of July 14th. And then the date, I'd have to look up the exact date, but it was approximately the 21st, I think on the night of the 20th probably, 20th or 21st we brought in the first incident management team to go to Grant Village for the Snake River fires, and that was Dave Ponsin. He, I think, arrived on the 21st and took over the fire on the 22nd or the 23rd, I forget.

DP: I can check. What was your relationship between Area Command, the various incidents and also the headquarters here at Mammoth at the fire cache? How did they work in concert with each other?

DS: Well, we were a little bit different than most other incident teams in that on July 20th we were managing all of the fires within the Park. There was some suppression being taken on the Red fire and the Falls fire at that time. We were preparing to take some action as of the evening of the 21st, when the Shoshone National Forest formally advised us that they didn't want any of the fire on them. We started preparing to take measures on the Clover-Mist fire.

Yellowstone is a very large place. The logistics of getting people to places, helicopters, lining up enough people (crews), and the support of those people was a difficult task. We had anywhere from two to four monitors on each of the fires at that time. After the first few days, when we had up to a couple of hundred people, we handed off the different

fires to different incident teams at different times. We were trying to keep a certain level of balance of being able to effectively manage the fires and integrate the Park operations. As things became larger and larger and more complex, the entire Park staff was involved in one way or another. Maintenance crews were involved as far as dump trucks and loaders and garbage pick up and special sewer systems. The interpreters began stepping up the fire information as far as informing visitors as to what was happening. Our administrative division (at that time we had no buying unit) began buying all the supplies and material, setting up the mess hall, receiving supplies and accounting for them. Payroll obviously became an administrative workload. Administrative support became a major deal. So, we had a very busy operation.

This first Incident Command operation became known at the Yellowstone complex. The name became confusing later on, so we changed it to the Mammoth complex. So, the 22th or so we handed off the Snake complex. On the 25th, Monday, we handed off the Clover-Mist and it was like the 26th, 27th that we handed off the Fan and by then the North Fork was already in the Park and the Mink was starting to come into the Park. And those were being managed by two other teams. So once we handed those fires off, we still were managing the Cub, Lava, etc., all of the initial attack. But other fires like the Cub fire had approximately two hundred plus people on it, even though it was only seventy acres, it took two weeks to put it out. That's how difficult control was. Each one of the large fires had some values at risk, either a developed area like Grant Village or leaving the Park and going to a timber sale like the Clover-Mist, or leaving the Park in the Fan and going up into private property. Once it was decided that the Clover-Mist would probably not leave the Park (not only by us, but by all of the fire behavior analyst and the incident team) and that it would probably stay west of the divide, we went back into a confinement suppression strategy on it. At this time we received it back into the Mammoth complex. So, it went. We received and took back the different fire complexes to manage.

After Ponsin left Snake River there was a Class II team there for about a week. They said, "Hey, there's nothing to do here," well in fact, it turn out that there was something to do there for the next three months. We took over that, we put actually a Class II team there that was working for us. Every developed area was evacuated as least once, at one time or another. And so therefore, everything that this Park is all about, the resources, the resource protection, the visitors, and the employees (we have 5,000 employees who work in this Park) were totally involved with the fire operation. And you know, people say, well you should have brought in another overhead team in Mammoth to run all of this stuff and that I personally should have stayed more as a liaison. We assigned a person with each one of the fires within the Park. We didn't do it with the Mink, they didn't ask. It was so far away that we didn't figure, there was any action being taken in the Park other than defending the cabins and we were doing that. We had fairly well qualified people in each of the other fire camps assigned as a line officers representative. It was easier for us to keep in tune with all fire operations by maintaining an Incident Command operation. We were getting many direct calls from congressmen, the Secretary's office, and media. It was important for us to keep an eye on all of the other fires within the Park. We had a well organized fire operation. To bring in a new incident team and rotate them out every two or three weeks, considering the time it

would take for us to orient them to what as needed to be done, would take more time than doing it ourselves. So we decided to keep the Incident Command position and the operation section chief position staying the same (Steve Fry and myself, and we had deputies). The other positions, plan section chief, finance chief, etc., were interagency, mostly Forest Service and BLM. And those rotated every three or four weeks.

Well, you can recognize from July 14th to October 27th or whatever it was when we finally shut down, how many teams would have had to rotate through there and I think the least people that we had after that first few days was probably 200 to manage. But it went up to 1,500 at different times, as in when we managed the Mammoth section of the Wolf Lake complex when the fire came to Mammoth. We were in place, knew the area, knew what it would take. So, it was much more logical for us to manage the fire coming here than the team that was at Canyon trying to defend Canyon and Tower and a thirty or forty mile fire front. And so it was much better for us to do it. To have brought in another team would mean they wouldn't have known where the utilities were and other important services. We had it all set up, and this (Mammoth) is kind of like the home land. And so we felt it was much more efficient in a lot of ways to do things ourselves than to keep trying to have one more operation to liaison with.

As time went by and all incident operations got so spread out, like the Clover-Mist, from Crandall to Pahaska, they had trouble communicating among themselves, much less communicating with us. Yellowstone is not Santa Monica Mountains where whatever it takes you go out there and bulldoze it and put it out no matter what the resource damage. We were still trying to protect Yellowstone Park not only from the fires but certainly from man. In our history, as indicated by most of the large fires around this country, after a few years of the fire going through the biggest scar left is mans impact. And so we feel we have a very important responsibility to protect the Park. In September we took over management of Wolf Lake and then in October we ended up taking the rest of North Fork. We'd already taken Fan, we already taken Snake River and then we took our portion Clover-Mist. And then there's Storm Creek, and then there's Hellroaring. You could only have, I don't care how big a Park or forest you have, so many qualified people that can speak for the line officer. We've gone over with our staff many, many, times what would we do different. We don't see too many major decisions that we would do different considering the information we had at the time. Some people have said the chief ranger was involved in too many things and shouldn't have been the incident commander. I can only say that I would like some specific incidents where the decisions would have been better or different because of that. And I can probably show you a lot of other negative situations that probably would have occurred. There would have been less communication. We didn't need an additional incident management teams to have to coordinate and liaison with.

)P: What were some of the particularly sever problems with communication and logistics involved in suppression?

DS: Well, you mean within the team, within a specific fire or you mean overall?

)P: Overall.

)S: Well, just the distance. I mean the Mink Creek fire camp at Blackrock Ranger Station, you know, is 150 road miles away, 150 road miles. The fire camp at Crandall is 75 or 80 miles away. It's 50 miles to West Yellowstone to Area Command. It's 50 miles to Old Faithful.

It's 75 miles to Grant Village. Those are not freeway miles, those are time consuming miles and that's to say if the roads were even open. Because every day there was at least one if not all of them closed for part of the day. So physically to get together was very difficult. To fly, we were short of helicopters, so you hated to take out of operations and every time you had meetings you had to do that. Or you were smoked in and couldn't get there anyway. And telephones where places like Crandall or Pahaska, or Grant Village, even Mammoth, as many phone lines as we have into this place, often times when they were trying to call here or whatever would be busy. The system was overloaded the majority of the time. And then to think when you got through that the incident commander, whether it be Area Command or Larry Boggs at Crandall or Kurt Bates at Canyon, was there, probably not. I mean he's not going to wait for the phone to ring. So then when he comes back and gets the message, number one, he's got to get through on the phone, and number two, you've got to be there. Radios were running on eighty-six or eighty-eight radio frequencies on all of the complexes. There was no way to have a command link that you could carry on an administrative conversation. The DG's were set up and that helped messages but you can't sit there and communicate, I mean you can send messages but not communicate. So I think that was probably one of the biggest concerns.

And you know we kept getting people come in here highly trained, highly skilled professional fire crews and overhead teams. Some had fought fires in wilderness before, some haven't. Some have fought fires in national parks before, most haven't, not on a scale like this. And if your values are, your philosophy is not necessarily into what national parks are all about. If you work for CDF, the California Division of Forestry, where you have fires regularly and the first thing that stays loaded and ready to go is bulldozers and you rely on that tactic. When you come to the Park and the Park says we don't care to use bulldozers here unless it is absolutely the last resort. Then some people take that as tying their hands, not fighting the fires aggressively. We don't like to drive off the road if we don't have to, we don't normally do it. So, when we tell people we don't drive off the road unless it's going to absolutely save something. The things that get blown up out of proportion again through the media and otherwise is if somebody drives off the road and the ranger says get back on the road. The incident commander had told them not to drive off the road. Where he was going would not have made a difference to the fire. And yet that focuses the media and they blow it up that the Park ties their hands and yet it didn't make a difference to suppressing the fire.

We closed the gate and did not let crews in the Park for a few minutes. This was a communication gap, again as to who was doing what, where. Some of the teams (a few individuals on some of the teams) lost sight of who they were working for. They became so emotionally intent on doing something that they didn't care that they were in the worlds foremost national park. By god, they were going to put this bulldozer in. We had to delay them to see what they were up to, what was going on.

DP: You mentioned the media latching onto some of these events. How did the, both having media all over the place physically in your way affect you and others as firefighters. Also, how did the coverage mentally affect people and their attitudes, the fact that there's so much controversy?

DS: I think their physical presence probably didn't. It may be a pain in the ass to have an extra person whether it be a reporter or a congressman, or some of your own staff sometimes, you know, to have an extra person around, but the fact that there were reporters (and there may be exceptions to that), but by-in-large just the fact that we had a few hundred of them running around, my concern was there safety. Because they were looking for flame and smoke and trying to get there. I think its important to provide them access, we tried to run as many open camps as we could where they would have access. We let them go in helicopters, we took them on the fire line, we went out of our way to try to do it.

I think the big problem that I have with many of them (not all) was that they got, many of them got into competition for the sleaziest news. It kind of got old to see headlines about Yellowstone's fire. They started loosing headlines so they had to start finding controversy. Who is at fault here, what's the problem. And so, if one thought he found it, the next guy is going to find more, even though his story might be based on the other guys which is unfounded. So by the time it gets over to third person! I had reporters quote and tell me, "Well I got that from so and so AP." I said, "So what!" I mean that doesn't make it true. So I think it was just like being intimately involved in Vietnam. The body count thing, you know, the reporters are looking how many gooks were killed today. That was what was important. It didn't matter how people were doing, all the successes, I mean, how many people were killed. And that's what sold newspapers, that what had the competitive edge. Who had the hottest scoop, the largest controversy, the biggest riots, the biggest, you know, people shot in the head or whatever it was.

Well, we were in this thing for almost four months from July through October and there was a little bit in June, some into November. But there's a good three months of active media. And so, obviously, after the first month or so things got a little slow but they figure out a way to keep it. So that became the number of acres burned, and conflicts between agencies, the man in the street interviews, just like Vietnam or World War II. The reporter goes out into the fox hole and he talks to the guy and says, "Son how do you think the general is running this war?" And the guy whose sitting there, ankle deep in water, and there's snow on the ground and he's cold and he's hungry, and he says, "I'm not very well," and you know, "if I was in charge of this I could do this or that or if they just let us go over there I could do this." He had no idea what the big picture was.

The fire operations in this Park had nine or ten thousand people out there. You could go interview that one person whose responsible for 200 foot of line, had no idea what was going on, overall philosophy, impact, fire behavior, or anything else other than that part of line he saw. And, he says, "Hey, if they just let us we could put this fire out". He had no idea that over the hill what we saw coming around. The fire ran three miles this afternoon with the wind, but that's okay he could put this spot out. Well we may not have wanted to cause the damage that would have occurred in order to put that spot out because we knew it was going to be engulfed or enveloped by the other part. So, that gets into the media and the media says, "Park ties his hands, Park prevents suppression, not aggressively fighting fires."

One thing we do in all the fire camps is provide firefighters with recreation, reading, and they like to read about themselves. And so here all of a sudden they start reading this stuff about controversy. Now all

of a sudden they all say, "Yeah, that's right, if they just let us put bulldozers out there." And so you get hundreds and thousands of these guys thinking that their hands are tied based on what they read in the media. The whole things turns out to be a crock of shit. One bad apple spoiled lots of them. Now the big strategist folks, and that's not to say some of the incident commanders didn't say, hey by gosh, you know, if I was in southern California I could build ten wide bulldozer lines and I can do that in no time, I've done it. And we're saying, you know, we already have thirty miles of bulldozer line in this Park, black on both sides, why do we want to put any more in? Every three weeks, you'd get a switch out of the incident teams. The new ones hadn't seen any of the fire behavior. A new team comes in and the next day totally changes the strategy and tactics. They have new people who haven't seen it and that was frustrating for us. Because every new team you had to re-up your liaison and your concentration of communication to say, hey, we tried a lot of these things, we had the fire jump one mile wide canyons, large rivers that are far wider than any bulldozer line that you want going to make. We would say we don't need the bulldozer lines, in most cases they will not do any good. So that was real frustrating for us. A lot of that controversy went back to media and or people coming in here.

The fire behavior books have been rewritten. I think every behavior analyst that I know that was here agree that these fires were way off the chart. You know, then you start blaming it on our fire management policy, or somebody's ineptitude in tactical deployment of resources and yet somebody comes in and second guess everything, either in a review or as a new overhead team. I mean, we looked at this and learned something new every day, but I think we had a much better handle on it than a lot of folks ever got because they were here too short. And that was another advantage being involved intimately with the whole thing every day. Because we really did know what was going on.

DP: On a personal level how about the disadvantages of fatigue. It must have been tremendously . . . ?

DS: Well, I don't know anyway you could have gotten around that, even if we hadn't have been the incident commander, we still would have been working sixteen, twenty hour days. I mean how would you have not. To get around . . . .

DP: I don't mean that in a derogatory sense, but how was that?

DS: Well, we have a mandatory health and fitness program in this Park for all of our emergency service employees, for all of our rangers. And I think those who were pushed the most are in excellent physical and therefore mental condition. And I think that was a major factor in their ability to sustain for three or four months. By mid July we knew we were that we were in for the long haul unless it rained. We talked in our staff meetings about diet, exercise, and how important that was. It affected good decisions, how we got into rotations where most of our key staff, we were able to get them off two or three days every couple weeks. We had a few people burn out, it was obvious and we got those people reassigned to something else and get them out of here for a while. We did have breaks.

I'd say the smallest our operation got was about 200 people. But 200 wasn't a big deal when all of the big fires were operationally being handled by somebody else. Our management team was supplying other fires so that kept our logistic folks very busy. Our operations and command concentrated on liaison with the other fires in supporting them as much as

we could, making sure they knew what the Park was all about. As things became spread out, it became evident that everybody didn't have quite the same philosophy that the National Park Service has. I truly believe if we had not held firmly on the use of dozers early on that we would have now over 300 miles of bulldozer line in this Park. The lines would be black on both sides or they would be green on both sides because the fire would have never got to it. I think that's worth a lot.

DP: You mentioned that the press seemed to focus a lot on interagency conflict, how was the cooperation?

DS: I think certainly there were individual personality conflicts here or there, but with a few minor exceptions, I thought the interagency cooperation and communication and working together was sensational, was exceptional. I mean, everybody was trying to work together and I think, by-in-large, did work together. We got accused of tying peoples hands, doing something different or doing something a different way. I think this was unfortunately construed or misconstrued to mean not being aggressive. In fact, we did not want 300 miles of bulldozer line in this Park, especially when you had a less than 50 percent chance of it being successful. It comes right down to that. As far as any tactical disagreements might have occurred, I think if you were to go out and personally interview, hopefully you will, every one of the incident commanders. I'll bet you that half of them will say it wouldn't have mattered what kind of fire line, how many bulldozer lines you would have had. And they will be some who say that it would have helped. You need to analyze how long they were actually here. Some of them were only here for a week or ten days. Some of the biggest critics that we had were only here for ten days on some of the biggest fires. But they were experts for that ten days. That's not very realistic.

DP: That's one of the things that Superintendent Barbee was saying is the fact that such an amount of time, such a long amount of time so many people went in and out.

DS: Yes.

DP: So dissimilar to other natural disasters.

DS: That's right and that's why the continuity, we felt that having one team, our team here in Mammoth which could move into all these voids and maintaining continuity of command and operations was critical. We had known from the beginning and we knew until the end what was going on basically on all the fires, in all the operations. That continuity, I think was, at least as far as the saving of this Park goes from the impacts of man, probably one of the most important things that occurred.

DP: Comment briefly on the functioning of Area Command and the use of a Area Command in the Incident Command System?

DS: Well, we had an unusual set up here as the superintendent's key and overall representative. They (area and incident commanders) knew they could talk to me as well as Bob probably for strategic or tactical direction or information as to what the Park wants to do for a given situation. So we saw them from that light. And then on the other hand as an incident commander, I technically worked for them.

[TAPE INTERRUPTED]

DS: This gave me more reason or cause to talk to them, both because, they needed to get a hold of us for this, and that, and we went out of our way to get a hold of them for other issues. And so our relationship, at least I felt, with them was exceptionally good. I never had a problem with Area Command. We got the resources that we needed that were possibly

available. As I say, we were looking at the whole picture. Now if you were an incident commander in Crandall or in Jackson, you might have felt you were the bastard child because back to that communication, you couldn't get in touch with Area Command, or really didn't understand their role. They were already set up, Area Command comes in and are they (Area Command) in charge or not? If they're in charge how come they don't take some of those resources over there and give them to me? And the other one down there says you're not in charge, so I'm not going to give you my resources. And so, then they go to the region or BIFC and they say you are not getting anymore resources. So, they were in an extremely tough place. I think, every one of those of the Area Command folks from Troy Kurth to Ditmer and Gale and all the folks in between, Cox and all of them just did an outstanding job, an impossible task.

People say it was too big, it was impossible to work to start with, we should have had three Area Commands. That could probably have been done in a number of different ways. I'm not sure if it would have been any more effective in as far as distribution of critical resources. But I think every one of those guys busted their ass to do a good job and, by-in-large, did an outstanding job. I think its unfortunate that some of the incident commanders resented their presence. Many of the incident commanders didn't see the big picture or were not privy to all the information flow. I feel some of the incident commanders wrongly condemned Area Command in a lot of ways saying that they were bad, ineffective, and it didn't work. That might have been true at times, but I don't think the Area Command staff had much to do with problems. You've got to look at a few levels higher and a couple of levels lower in a couple of incidents to point fingers as to who did what. By-in-large, I'm really glad they were there.

I think the aircraft, air traffic control, which again you'll get certain incident commanders that will say it was bullshit. I think it was the single most important thing that saved us from having any aircraft accidents. We think of the number of fatalities, death and accidents that occurred in California last year on the '87 fires in southern Oregon, northern California compared to what we had here.

DP: Yeah, tell the activity on that and also the overall safety record.

DS: Well, it speaks for itself. We had one unfortunate fatality after the major fire operations were over. It occurred well into the mopup. A snag, considering the number snags that we have and the way they fall. There were no other really serious injuries. Some medevacs, bee stings and we had some broken bones here and there. I don't know how many people actually went through here, but there were nine or ten thousand people working here at the peak. In order to sustain nine or ten thousand (they were only here for tree weeks at a time), we probably put twenty-five or thirty thousand people through the system. They were tired when they got here, they were tired when they were here, they were tired when they left. The fact that we still didn't have major accidents is absolutely amazing.

I don't think that there was any one person responsible. It just shows the years and years of getting it beat into all of our heads, all o: our training, that safety is first. Whether it be working at night, whether it be putting people in front of fires, whether it be travelling slow and really knowing that those young bus drivers go too fast, and wher you throw in the military on top of that who are basically inexperienced and novices at what they were doing, I think its remarkable.

DP: This is just an open ended question, is there anything you'd like to say for the historical record?

S: Well, I still go back to the media part of it I think. I think it's really unfortunate that the fires became the Yellowstone fires. Whatever the final acreages are going to end up being, the latest satellite photos show the total acreages somewhere over a million acres of which seven to nine hundred thousand or so is in the Park. And if you go out and you break down the fires Fan, the Clover-Mist, and the Snake River are the only fires that are associated with Yellowstone National Park's fire management plan. That is approximately on third of the total acreage of all fires in the GYA (Greater Yellowstone Area). The Hellroaring, the Storm, the Mink, the Huck, and the North Fork did not start in this Park. No one can say that we had anything to do with these fire starts.

You'll get those who say, well if you would have taken aggressive action on the Mink Creek fire when it came into the Park you could have kept it smaller. Well, bullshit, why didn't they (the Bridger-Teton) take action on the Mink Creek fire when it was only 100 yards wide at the north end of it before it came into the Park. The fact is, there weren't resources available to do it once it got into the Park compared to all the needs of other high value at risk areas. By the time it got into the Park we were having daily and regular threats to developed areas. To think we're going to put ten to twenty crews and the support needed into the furthest, most isolated area in the continental United States where there was nothing but a few cabins at risk, didn't make any sense at all. That was just a matter of priority. I think the report stands on its own as far as the North Fork fire and the tactics taken, priorities set at the time.

Aggressiveness or lack of it, will be debated for years. You'll never convince a segment of the people of West Yellowstone that we aggressively fought those fires. The Forest Service said what their values were. They did have values at risk with the tree farm and everything on their side of the boundary. We said that plateau out there had no value, meaning monetary value to us. If you've only got two to four crews to start with, save the tree farms. We'll save Old Faithful because it's defendable. So that is a strategic decision, that is not a lack of aggressive fire suppression.

You can only do so much with what you've got. The incident commanders on the Hellroaring, the Storm fire had pretty much carte blanche to do what they wanted with a few minor restrictions such as bulldozers on the north boundary. Which included approval for use of bulldozers along the Warms Springs Divide, well inside the Park. The incident commander chose not to because it wouldn't have held anyway and we're glad he didn't. But when it gets right back down to it, we're being the stoolies for a million plus acres of fire burn, when in fact, we should be accountable and are responsible for a little over one third of those acres. And yet, because of the media hype, the became the Yellowstone fires. Who has ever heard of the Targhee Forest outside of this general area? I mean, somebody in Vermont or southern California probably never heard of the Bridger-Teton, the Shoshone or some of these national forests. They've all heard of Yellowstone. Well if they haven't heard of it, it isn't going to sell newspapers or make the nightly news with Dan Rather. So by the time that thing mushroomed, dominoed, continued to grow, it's all Yellowstone Park, it's all national park fire

policy and none of our neighboring agencies really had to stand up and take any of the guff that we took other than internally.

So, I think that's unfortunate because it really blemishes the Park Service, it blemishes our fire management program, and it holds us accountable for everything that happened, in the public's mind. In fact, that's not the truth. So that would be nice to have that accurately reflected. I'm happy to say there aren't 300 miles of bulldozer lines in the Park.

DP: Well, thank you I appreciate your time.

DS: If you have any other questions be sure to give a call back.

DP: I'll give you a call.

Interviewee: Brian Stout, Forest Supervisor, Bridger-Teton National Forest, Jackson, Wyoming.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 25 October 1988

DP: We're in Jackson Wyoming, it's October 25, ten o'clock in the morning, we're in your office is that right?

BS: Yes.

DP: In the office of Forest Supervisor Brian Stout. And he's consented to do an interview here this morning. Let me set this up so it's not so conspicuous.

BS: That's okay.

DP: Okay, first off, I'll try to ask a few questions here or there to kind of direct a few things, but mainly I'll kind of listen and kind of butt out. Okay, I guess, maybe a good way to start off is by have you briefly explain who you are and then tell a little bit about the forest like what the main emphasis resource management on the forest is.

BS: Okay, I'm Brian Stout, forest supervisor in the Bridger-Teton Forest. A forest consisting of approximately 3.4 million acres in northwestern Wyoming, adjacent to Grand Teton National Park and Yellowstone National Park on the north and extending down though the Wyoming Range, Salt River Range to the south and through the Wind River Range to the south and east. The forest, because of its proximity to Yellowstone and Grand Teton and the surrounding scenery, has always been recognized for its recreation values. It's had very heavy outfitter business that's operated, in fact, it's my understanding that we probably have the largest outfitter operation of a national forest anywhere in the United States.

We have something in excess of 240 permitted outfitters on the forest. Associated with that recreation values are the wildlife values, some of the most unique wildlife opportunities in the lower forty-eight states are within this general area. We have high oil and gas opportunities, we have one of the largest sour gas operations in the continental United States in the Wyoming Range, south of Big Piney, Wyoming, on the forest, operated by Exxon. So there's very high interest in oil and gas opportunities on the over thrust belt. Water, water quality, water shed values, are high on the forest. The timber program is not a real high value program, it's dealing primarily with lodgepole pine, however the more advanced stands on the forest are spruce, fir types. Lodgepole pine is primarily associated with the fire history in these stands. Many of the stands are in the 120, 150 year old age grouping have not and had a lot of real major fires since about the 1930s, but obviously

looking at the vegetation it is very definitely associated with past fire activities.

DP: Can you kind of give a background as to what formed the conditions that made this years such a fire year?

BS: Well, obviously the Teton Wilderness is where much of our acreage was and then we had another fire in the Bridger Wilderness. So we were, much of our fire activity was within wilderness areas. Areas that have been wilderness for quite some time. The Gros Ventre Wilderness was only established in the Wyoming Wilderness bill in 1984. So before that it was not in a wilderness status and it doesn't have quite the build up in terms of some of the fuel loading. The Teton wilderness is immediately adjacent to Yellowstone National Park on the north part of the forest. We have some very old stands within the area, some very heavy fuels. And then as far as the actual conditions that we experienced, in July in 1987, we had a major tornado go through this country. It touched down in the Teton Wilderness area and impacted several thousand acres in the Teton Wilderness area which further concentrated some major fuel problems in the area. So we had that natural phenomena occurring and it is my understanding based on some of the scientists that looked at that, that this maybe one of the highest occurring tornadoes on record in the United States. We have for the past three years had dry conditions. Moving towards, I guess, a drought condition this year. In particular, several of the ranches in the valley experienced some real problems in terms of hay crops because of lack of moisture. We had pretty good moisture early in the spring and until June. But, then the storms all seemed to split and go north and south of us, and we did not get our normal weather patterns at all. We were below in terms of moisture. We had some fairly easy winters and haven't had the normal moisture flow, but at least to my way of thinking one of the most significant things that occurred to us particularly as we got into July and August was our upper air currents. We hit a phenomenon where they were splitting, they were hitting the west coast of the United States, splitting and going north up closer to the Montana, Canadian boarder and south. The normal patterns of rain that we would normally expect even in a dry year. In July and August these simply didn't occur because of that . . .

DP: Went right around you in effect.

BS: . . . jetstream, yes, right. So, we were low in moisture. We did have a pretty good fuel build up, and then we had this unusual weather pattern with the upper air current, where storms where bypassing us. And, at least, to my way of thinking, I think those are the three significant factors and quite frankly I believe the upper air flow splitting effect is probably the most significant factor that hit us this year.

DP: Have you had very heavy insect infestation, has that had much of an effect on . . .

BS: Obviously with a mature forest we have some areas with some insects and disease, but not of a real serious magnitude where you find acres, and acres that have been literally killed by insect infestations. More of the phenomena that I've observed in the forest has been individual trees within the stands that are infected but not massive build ups that killed large areas. We did have one area not in the fire area but down in the Greys River Country were we for the past couple of years have done a fair amount of salvage operation because we had a more significant problem.

The other thing is that in the Teton Wilderness where much of the fire occurred, although lodgepole pine is a part of the stand, actually,

we have not treated that vegetation for so long that we're a little further along than successional stages up there. And many of those stands are spruce-fir. And you don't have quite the same insect and disease problem in the spruce-fir that you can have in a lodgepole stand. So, yes, there is insect and disease, problems within the stands, mistletoe, bark beetles and so forth, but not of an epidemic proportion that I think, is really seriously impacting the fire condition of some of these stands.

DP: What is your fire, what has been the use of fire, as far as your management policy goes for the wilderness areas and what is the management policies of the fire in the wilderness areas?

BS: Well, we have a fire management plan for the Teton Wilderness and for the Bridger Wilderness. And that plan recognizes the ability to use naturally occurring fire as a management tool within the areas. There are very definite prescriptions under which those natural occurring fires would be allowed to be classed as a prescribed natural fire. And there are objectives set in terms of why we would allow fire to occur. And those are contained in the management plans for the forest. They were developed prior to my coming to the forest and were in effect when I arrived on the forest. The prescriptions, of course, deal with the burning conditions, the fuel moisture contents and so on and so forth.

DP: Some of the management objectives would be to reduce the fuel load and things like that?

BS: Fuel loading, habitat values, yes, vegetative conditions, right.

DP: Okay, as you do boarder on Yellowstone Park and Grand Teton National Park, are there any interagency agreements as far as fire is concerned?

BS: Yes, there are definitely interagency agreements that in terms of suppression and activities, cooperative agreements, in terms of suppression activities, how we work together. We have frequently in the past utilized some of our expertise to assist the Park with some of their fires that have occurred. In terms of fire behavior specialists, fire suppression specialists, we have historically even used joint crews, where we've put together crews made up of both Park Service and Forest Service employees. It's been a cooperative effort and there are cooperative agreements in existence in relationship to that.

DP: What's the situation when a fire from one unit approaches the boarder of another unit, are there any sort of coordinate, what sort of coordination, I believe, was there a situation with the Mink Creek?

BS: Well, actually three of our fires this summer had that situation occur. The first thing that obviously has to occur as we make an assessment of the fire and notify the adjacent agency of the potential of that fire coming on and we reach agreement with them as to whether or not they are willing to accept or not accept the fire. So, it does influence the strategy that you use in relationship to how you fight fire at that particular boundary or line. Three of the fires were involved that way. First of all the Mink Creek fire which started the 11th of July, burned north and east through the Teton Wilderness until it reach Yellowstone Meadows. We had already determined Yellowstone Meadows to be one of our containment lines and were working to contain it on that line. The fire moved north through a finger of timber on the west side of Yellowstone Meadows and it was threatening to move into the Park. Also, just after you move into the Park at the mouth of Lynx Creek, is about where the tornado of '87 stopped and there was a fair built up of fuels inside Yellowstone National Park at that mouth of Lynx Creek. We talked with the Park, in fact, I personally talked with Bob Barbee about that threat and

about where they were in their strategies and whether or not they were willing to accept the fire. And in that particular case, Yellowstone Park did agree that they would take that fire, if and when it crossed the line. The Huck fire and the Hunter fire both started on Grand Teton National Park on August 20th.

DP: The 20th was day that . . . .

BS: And it was a very high wind storm. We recorded winds of 75 miles an hour at the time. Both of those fires started by trees blowing down across power lines. One on the old hunter ranch which is where it got it's name from. The other one up near the flag ranch properties on Grand Teton National Park. They very quickly, within matters of seconds almost, it seemed like, crossed the line and were onto the national forest. So, even though the agreements where all there in place, we really didn't have time to talk with each other about it. We immediately, however, coordinated with each other and worked very close in relationship to suppression activities on both the Hunter and the Huck fires. So, the agreements were in place and as far as I was concerned worked very satisfactorily.

DP: Were the suppression efforts in Grand Teton National Park and the Bridger-Teton Forest, what was their relationship with Area Command that was set up in West Yellowstone?

BS: Well, that was a little bit difficult for us to understand from day to day. I guess that's just the problems of communications that you get into when you're in a major effort as we were in this summer. We started with the Mink Creek fire in July. When Area Command was first set up we never received information as to which fires were going to go under Area Command and which ones were not. In fact, we were somewhat led to believe by word of mouth that we were getting, that basically Area Command was set up to manage the fires within Yellowstone National Park. That wasn't true I found out later, but that's the informal communications we were receiving. So, we functioned on the Mink Creek during July basically assuming it was our responsibility and that we weren't under Area Command. However, immediately after Area Command arrived on the sight I had a discussion with Troy Kurth, who was the first incident commander at Area Command. And the agreement that Troy and I had was that we would continue to manage the Mink Creek fire, however, we would communicate daily to let them know conditions, the status, what was occurring, and we also agreed that we would be sure that any resources that were released off the Mink Creek fire were released through Area Command so that they had priority in terms of reassignment to other incidents that were occurring within their areas of jurisdiction. That operated pretty satisfactorily and then apparently there was a change in Area Command and the incident commander and the staffing and so forth and again through communications problems we were never notified of the change. In fact, even under the initial Area Command we never, in fact, I guess I'd have to say to this day, I've never seen the authorization letter that was ever given to Area Command. So, although it functioned OK, major communication problems, it complicated the matter.

Telephone numbers would change, we didn't get notified of those things. So, we had a little difficulty communicating. When the Huck and the Hunter fire started we called Area Command at that point in time and the first indication was that they had their hands full and did not want either the Huck or the Hunter fire. So, we began operation with Grand Teton National Park and the Bridger-Teton coordinating and assuming that

we had been instructed not to go under Area Command with those two fires. The Huck fire, by that time there were so many incidents going it was difficult to get resources including overhead teams and so we assigned the Huck fire and we had an Emerald fire also going, a small fire in between the Huck and the Mink, to the same incident commander. However, he had some qualified incident commanders in his operations plan, Tom Patten and Kent Mackity. And so what we wound up was Dale Jeral as the incident commander for the Huck, Tom Patten as IC for the Emerald fire, and Kent Mackity was the incident commander for the Mink. They were operating under the same base camp and actual coordination, I think, was beneficial to us.

The Hunter we managed to pull in a separate Class I overhead team and it functioned there. Within a matter of a couple of days it became evident that the initial decision not to go into Area Command wasn't the way it was going to work and so at that point in time the Hunter and the Huck went under Area Command. We're still left with a little question at that point in time as to whether the Fayette fire, which was down in the Bridger Wilderness near Pinedale was under Area Command or not, eventually that also went under Area Command. And probably was beneficial from the stand point that all of those incidents where requiring large numbers of resources and the coordination of those resources was probably more effective through Area Command.

I guess, the only point I'm trying to make is that communication created some problems for us. And it's kind of, one day we were and the next day we weren't, it seemed like it was difficult to know exactly where we were. We eventually did try and overcome that problem, established a zone coordinator down here that reported directly to Area Command and try to improve communications and make sure things where flowing as smoothly as possible. The first one of those was Jack Galligher who was the incident commander on the Hunter fire we pulled him and made him the zone coordinator that eventually when that Class I team was release Jack went with his team and Gordon Stevens then took over as the zone coordinator for us.

)P: What is Jack's point of origin, his forest?

BS: I'm not sure where Jack . . .

)P: But he's not . . . ?

3S: . . . no, he was just a incident commander for Class I team that was pulled in here for the Hunter fire.

)P: Has, what is the role of the GYCC been, Greater Yellowstone Coordinating Committee, has it taken a active role in this or . . . ?

3S: Well, the committee from my perception didn't take a real active role during the fire suppression activities. The regional foresters and the regional director for the Park Service out of Denver did meet and I'm aware of the fact that they discussed and approved the Area Command set up and that they provided some direction in terms of authority to that Area Command. It was our understanding that those authorities were for coordination and not command as the title Area Command infers. I wasn't involved in those meetings and I haven't seen those delegations of authority that were provided and that's part of the communication problems that I discussed. Since the suppression activities, the GYCC has played a rather active role in coordinating the review processes that will go on in the various incidents, the record keeping where it will be kept, central filing, things of that nature. So, I think, they've done with the

information flow and the efforts in terms of rehab work and so forth and review processes.

DP: Okay. How bout the local reaction to both the fire and to the fire suppression effort?

BS: We made a major effort early on and in part of it I guess, is just my background having come from a public information officer background, to really try to create a flow of information. I immediately, when the fire problem first started with the Mink Creek fire, made a decision to on a daily basis, photograph by video and put together a no more than a one page brief of the current days activities. And provided that to the regional office, chiefs office, Wyoming Delegation, and the governors office in an effort to try to keep them informed because I was convinced in an election year there was going to be a lot of questions and pressures placed on those dealing in the political arena in relationship to this situation.

From a local standpoint, we also, set up to have an extremely effective communications flow. We set and showed videos in the local office here, and the Park Service office, at the local chamber of commerce, a varieties points where people would congregate so that they could get an up to date report of what was happening on the fires, did a lot of work with the media. I felt just really had an extremely strong information flow program. I would have to say that it took us a little time to get going and initially there was a lot of concerns because people didn't really know to much about what was happening. There was a lot of problems with terminology, people got very confused about what suppression tactics we were using. Fire suppression to many people means put it out. When we deal with control, contain, confinement strategies within a suppression effort that gets confusing. Some people thought confinement meant two people leaning on a shovel handle watching. So we had a lot of problems with misunderstanding of terminology. We went through a full fire escape analysis, tried to determine the most effective and efficient way to put the fires out. The containment strategy is what we selected in almost in every case, with a few exceptions on various segments of fires that were threatening buildings were we went to the control strategy. We did that because based, on our analysis on the fire behavior, and the conditions, containment indicated the highest degree of success.

Another term that got misinterpreted, misunderstood by a lot of people was light hand tactics. We used what we call the light hand tactic. We were within wilderness, our assessment indicated that if we went in and tried to build direct line we probably weren't going to be very successful. And so the light hand tactic, what it referred to was using natural breaks, meadows, rock outcroppings, burning out from those natural barriers and then using a lot of hose lines. The Mink Creek fire we had, during July, we had over thirty miles of hose strung out on that fire. We did it for two reasons, one was the effectiveness of fighting the fire and the second was that we recognized also, in wilderness we have a rehab responsibility when the fires out. I guess I feel really positive about what we did in that area because at the time other people were building miles, and miles of line by hand and with dozers, and that line was being tested and it was my understanding that something in the neighborhood of 2 percent of that line when tested held. Much, in fact, most of the line we were building from natural barriers was holding. We built line from natural meadow through blow-down from the '87 tornado just south of Enis Lake, I was up in the helicopter the morning we made the

decision or the IC made the decision to burn that out. That's probably the scariest burnout I've seen in my life, and probably the most effective I've seen in my life. Every inch of line held exactly as was planned on that whole thing during a very critical time in the burning period this summer. So, quite frankly from my perspective I think these light hand tactics proved to us to be one of the most effective means of actually suppressing fires this summer. And all it meant was just relying on natural barriers, using those areas to our benefit and removing the fuel before the fire got there so we could stop it.

)P: But there was some misunderstanding?

BS: There was, yes. People thought light hand meant doing nothing again on the whole thing. So, you know, although the information flow was, I thought, outstanding and eventually as time went on we literally took various key leaders from the communities up, flew them in helicopters to see what was going on. Members from the outfitters association, the mayor, the chamber of commerce, state senator, we had the state senator and the director from the chamber of commerce literally sat in with me listening at some of the strategy meetings that the incident commanders where having. The incident commanders got out and met with the publics. Dale Jeral had three separate meetings with publics who lived in and around the Buffalo Valley properties and so forth. And there are still some individuals, obviously, who have some personal view points that if we'd have just done something different we could have put it out. And there's still a lot of people discussing good and bad, I don't particularly want to get into that particular issue. From my stand point, we spent a lot of time putting out fires trying to accomplish our objectives this summer. I think we did a pretty fair job, based with the conditions we were working under. And I don't even want to debate the issue of whether it was good or bad or what. Because my objective was simply put the fire out and I wasn't dealing with any other values at that point in time. That still goes on and will go on for some time, but at least here locally in Jackson, Teton County, I felt a very strong degree of support and I've seen a fair amount of letters written and had a number of telephone calls complementing us not only on the information flow but on the activity, efforts that we made putting them out.

The Mink Creek fire is the only one that, you know, there's a few opinions on, the first three days that was a prescribed natural fire, July 11th, 12th and 13th, on the 14th we declared it a wild fire. One can second guess that I guess, one way or the other. At the time ignition occurred it was not in the blow down and the prevailing winds would not push it into any significant blow down. It was within prescription, I checked with the fire people and I was assured that we were well within prescription. I had some concerns about the dryness but there was a lot of concern that we have a fire management plan, and we keep talking about the use of natural fire, are we ever going to do it or not do it, we're within prescription. So, I did, in fact, allow that to burn as a prescribed fire for three days. The fire management plan for the Teton Wilderness requires us to do a daily review, which we were doing, in fact, the district ranger was on sight through that whole three days, actually observing the fire. It also indicates that a major review needs to be done at a thousand acres which we did on the morning of the 14th, that's when we decided, although the fire people were assuring me we were still within prescription, the actual fire behavior as it was actually occurring on the ground was indicating to me that it was more erratic than what

those prescriptions should have been and that's why I made the decision to go to the wild fire at that particular point in time. And from that point on, our sole mission was suppression. All the other fires were in a suppression mode from ignition on. But, they show the Huck fire in particular what can happen even when you're trying to suppress a fire right from the initial start. That burned six miles in just a little over two hours.

DP: You hit on it a little bit already, and I'll ask kind of a broad sweeping question so that you can pick what you want to answer. There's been the local reaction and then there's been the national reaction which is covered, you know, prime time news broadcast. A lot of that seemed to focus on the Park Service more than on the Forest Service. And both positive and negative, do you think that was warranted or what are the reasons for that. And also, kind of contrast the mission of the national forests verses the national parks.

BS: Well, I think first of all, one has to understand that even locally . . .

DP: Let me interrupt you after I get a four sentence long question.

[TAPE INTERRUPTED]

DP: Okay if you can remember what the question was.

BS: Sure. Okay, I think, first thing is we have to look at just the difference in the local reactions. I mentioned the reaction that I had here locally in terms of Teton County and Jackson which is where we're working out of. The same time I think it's very obvious that the reaction of other parts of the state weren't quite the same. Cody happened to be in the direction the prevailing winds were blowing smoke. And they got hit very heavily, although we had some smoke, and we had some of the inversions, the impact wasn't anywhere near what Cody had. So, the reactions were somewhat different in Cody than they were in Jackson. Cooke City, obviously was very directly effected and threatened and lose of structures and, you know, I think we can easily understand that public reaction there is different. We were in election year and the reaction that constituents were bringing to bear to their elected official, they have to respond to those things. And particularly have to respond to them in election year. So, I think, first of all, that part of the elevation to a national level was a result of the fact that people were being impacted differently within this northwestern Wyoming area and they were bringing pressure to bear on their elected officials which meant that some of these issues got elevated to a national level from that basis. Obviously, the size and magnitude of the problems we faced this summer attracted a great deal of media interest, which immediately elevated the whole situation to a national perspective. Once it's elevated however, then when you set a far distance from it and aren't directly impacted then you deal with value systems, where you stand with your particular values on good or bad, positive, negative, etc., in relationship to what was occurring. Yellowstone is, I think, recognized on a national basis as one of the real, to use a Park Service phrase, crown jewels in the national parks system. And so, I would anticipate myself, even before hand, would have anticipated that a major fire occurrence or phenomena of this type occurring within Yellowstone Park would invoke a lot of emotional concern and expression on a national basis. The Bridger-Teton has a lot of interest from the stand point of a national forest, but isn't quite the same as writing about Yellowstone National Park. And so, I think, a lot

of focus on the Park comes from just the difference in terms of how the public perceives the areas.

I'm sure mission has something to do with it, although, most of what activity we had was in a wilderness area. And there's a degree of similarity in terms of management objective between wilderness areas and some of the preservation efforts that the Park has in their back country areas. I can't imagine a natural phenomena of these type occurring that wouldn't attract a lot of attention and a lot of focus from us as a society. That means that there's going to be a lot of evaluation done by perceptions, and by knowledge basis, and every other way. So, I guess, it's just natural to expect.

I don't know enough about the Park to know exactly how they put their fire management plans together and how they write their prescriptions and so forth, I can only talk from our stand point. From our stand point, it's a pretty detailed process and it's not a simple decision to class a fire as a prescribed natural fire. And it's not a comfortable position to be in as a line officer to have to make that decision because you're playing a very high risk. Yes, you've got a prescription, yes, we've agreed from a policy stand point that naturally occurring fire can have some benefits, but that's an unknown factor of how it's going to react, what it's going to do, and so it's a subjective decision that has to be made. And you know your playing risks when you make those kinds of decisions. They're hard. The easy way to do it is to cop out and never let one go, but then that's never following the policy, either, in the whole thing. I can't criticize anything that was done. There are decisions that take a lot of knowledge and a lot of guts. When you see what the reaction is to the decision you make you reassess quickly and try to make the right decision to make any adjustments that may be necessary. That's what we did with Mink Creek fire, and I'm confident that's the way the Park probably reacted also.

DP: What other agencies in our vicinity here in the Bridger-Teton Forest, there is the Forest Service and there's the Park Service, are there any other land managing agencies?

BS: Yes, right here within the Jackson area, there is, we have the U.S. Fish and Wildlife Service of course, with the National Elk Refuge here and the Soil Conservation Service has an office here. We also do a lot of work with BLM, mostly out of their Rock Springs district office and then they have a area office in Pinedale. They do have lands in the Jackson Hole area that they manage as well. So, and of course, they're deeply involved with us in the oil and gas managing business. Yes, BLM, U.S. Fish and Wildlife Service, Park Service, and Forest Service, from a federal stand point, and of course, with the state agencies, Game and Fish are right next door to us. And we have a very close working relationship with them. And very close working relationship and a very good working relationship with the governors office and also with the governors planning office in Cheyenne. So, we had a lot of involvement, lot of information sharing, and a lot of communications going on.

DP: What, I remember going to a meeting that was held in the Jackson Airport, and Marshall Gin . . .

BS: Gingery.

DP: . . . Gingery and others where there. They were talking about coordination with county and city and governments, can you tell me a little bit about that?

BS: Probably not anywhere near as well as Marshal can. The county commissioners here were very supportive and the counties on a state wide basis through the state office, state forester office were extremely cooperative, we used a lot of resources from counties, engine units, so forth. So, we had very strong support. Had excellent support from the state level in relationship to making national guard resources available to us, not only in terms of manpower and people power, but helicopters. And I had an opportunity a year ago on a different assignment, it had nothing to do with fire to work with the Wyoming National Guard and that's a really impressive outfit, very safe, very competent and they came in and worked with us here on the fires and just did a fantastic job for us. So, the cooperation was excellent. We did a lot of work in terms of trying to work with local businesses, in terms of supplying the fire needs.

We brought a ADO team in here and were paying vendors in cash for resources they were supplying so that they could afford to restock and wouldn't have to wait the long periods of time for checks, government checks to be sent to them. Had a purchasing unit set up here, we, whenever we began looking for other sources in Jackson, instead of going to Idaho Falls and other places we tried to move out into other surrounding communities, like Dubois, Pinedale, tried to provide as much business into there as we could. I think that has been very beneficial, there's also been obviously a few problems when you're dealing with the magnitude of the things that we were into.

DP: Of course, this is, won't come to bear until a few years into the future, what do you think the impact will be on recreation and wildlife in some of those major management objectives of this forest?

BS: Oh, boy. I don't know, it's a little bit difficult at this point in time to really try to focus on what's going to occur. I guess my mind is still pretty much into the, I'm having difficulty over all the activities we had this summer. I think most people, and I think it's pretty true throughout the area, have come to realize some of the mental images that were being conveyed that everything was black is not reality. My understanding is that the visitation to the Park in October is up quite a bit over what is normally expected in the month of October. And at least, locally what I keep hearing from people that go up and visit these areas were it's burned is that, my gosh it isn't devastation as I had expected. There's still a lot of green, and so, I guess, my feeling is that from a recreation stand point, we're very quickly learning that although the fires were large and devastating in many ways, they have not devastated our recreational opportunities. I also, really expect, and I think we've seen a little bit of an indicator of this from what I said in relationship to use in the Park in October, that at least for next year, there's going to be probably a major influx of people wanting to observe the phenomenon. So, it's probably going to be a little bit of an attraction to begin with. How long that will carry I don't know. Much of that probably depends on what kind of a job we as federal land managing agencies do in providing opportunities for interpretation of the phenomena and things of that nature.

But I guess, I don't personally expect a real major devastating impact on the tourist business in northwestern Wyoming. From the stand point of wildlife, we observed a lot of wildlife in the area. The losses that have been confirmed on the Huck and the Mink fire, on the Bridger-Teton are, I would have to classify them as minimal. The Game and Fish did surveys and was able to find twenty-three carcasses on the whole

area. I think that what we will experience, there was a lot of concern by the outfitters that they were going to be devastated. At least the information that I have received through Game and Fish is that the hunting successes this fall has been better than normal. The biggest concern I have with wildlife is that we'll get a real lush growth of vegetation from the stand point of food, but we have destroyed some of the hiding cover, security cover in some of those areas. And I don't know, my hope is that you hear the term mosaic pattern, the unburned areas will be sufficient to offset any major adverse situation that way. But, I have some concerns about the loss of security cover because of the areas being so large. I don't know if I can respond much beyond that. I have a concern over the impact of fish and water and we're trying to do rehab plans so that we can hopefully avoid any major soil erosion problems into the streams and so forth, but I think that's probably as far as I can go.

P: Just one or two more questions. One of them would be, at a certain point, I think, and I'm not sure which agency facilitated this there were restrictions to outdoor use and there was even talk of restricting the hunting season, restrictions of outdoor fire use as far as recreation. Can you give me a little background on that.

S: Well, we on the forest took some initial efforts in early July to place some restrictions on open fires, that was our first effort. Restrictions are basically fire prevention tools. My philosophy has always been that you don't fire the cannon 'til you use all the steps in between, so you build up new time. Our first effort was to close the forest to open fires except in developed campsites. We coordinated that with the surrounding forests, with the parks and with BLM. And they followed suit with similar types closures. As time progressed we put on tighter constraints, we went to what we refer to as a hoot owl, where we close the forest to chain saw use, internal combustion engines, catalytic converters, and so forth during the critical burning period, they could use it up 'til one o'clock in the afternoon and then it was shut down. All of the restrictions were coordinated very close with other agencies. They were used as prevention tools. We used the media to help us convey those closures. I can't shut the hunting season, only the state can do that. Montana made that decision to do some postponing. Wyoming didn't make that decision. They have to evaluate on a state wide basis. There's all kinds of problems if you close it down. What do you do with the permits? And an individual whose waited twenty years to draw a moose permit, and paid fifty bucks, finally got one and now you're shutting him off. How do you deal with those kinds of things? Can you postpone it? I mean there's a lot of logistics that are complicated in the whole situation.

I got a lot of calls wanting me to close the forest to hunting. I don't have that authority, but I had very strong concern for fire prevention. So what we did instead from a forest stand point, is we put on a number of new employees. We hired some of the local people, we got the national guard to come in and help us, and we manned thirty-five check points that were major access points into the forest. And, essentially stopped people and said, you know, the fire dangers are extreme, we have these restriction on, please comply with these restrictions. If you observe any problem areas, please report it to us immediately so we can take the necessary action. This action I felt was really positive. It got us through a very critical period with minimal impact on the public. The public really cooperated during this whole season in terms of going

out of their way to prevent risks in terms of other fire starts. Most of the starts we had were not man caused they were lightning starts.

Interviewee: J.S. "Stan" Tixier, Regional Forester, Intermountain Region, U.S. Forest Service, Ogden, Utah.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 9 December 1988

DP: Well, I'm in the office of Regional Forester Stan Tixier, and it's December the 9th, and he's been kind enough to grant an interview today. Well, since you got that book out, why don't you tell a little bit about the formation of the Coordination Committee and the role it has played in the helping to facilitate the fire suppression this summer.

T: Okay Dave, because the reason I asked about this, I think it's really important that historically we recognize that the units of the Greater Yellowstone Area and I'm talking about the national park and the national forest units. The Yellowstone National Park and Teton National Park and the national forests surrounding which are the Custer, the Beaverhead, the Gallatin, Targhee, Bridger-Teton, and Shoshone National Forest. And then the regional supervisors of those forest supervisor and Park superintendent positions, three regional foresters, and the regional Park Service director in Denver, had been meeting and coordinating and discussing the responsibilities in managing those different units of land in the public interests since the late 50s, early 60s. And it's only been in recent years, in about, oh I'd say in the last five years, that there's been very much public interest in that coordination and in that area as of entity, as a unit, as it were. And so, about three years ago, and I'm not positive of the dates, but the Greater Yellowstone Coalition, a group formed to, with the basic environmentalist approach, the kind of the preservation aspect of the Greater Yellowstone, what they call the "Greater Yellowstone Ecosystem". We prefer to call it the Greater Yellowstone Area, because we don't think it is an ecosystem. There's lot of different ecosystems in the Greater Yellowstone Area, so we make that distinction. Anyway, they've been proposing for some time, that management be either, well, it would either be a larger park or else it would be managed as if it were a larger park by law. And so Congressman [Bruce F.] Vento, and Congressman [John F.] Seiberling, the two subcommittee chairman involved, held a joint hearing of their committee and that was in the fall of, I guess the fall of '86, I'm not positive, '85, it must of been '86, fall of '86. And, in the testimony and the various discussions, the chief for the Forest Service, the director of the Park Service agreed that we would step up our coordination efforts, not only that, display it better to the public and to ourselves.

And the result of that was the production of this Greater Yellowstone Area aggregation document, and that lays out the status of the current

forest and park plans in the area. It's kind of a one time snap shot of the situation, because not all of the forest plans were even final at the time this was published, and still aren't, the BT's (Bridger-Teton National Forest) is not finished yet. But it does give information as to what the various forest and park plans provide and some explanation of how that's coordinated. And that's a handy reference document for the general interested public and for our own managers. And it's not intended to be a plan itself, but it's an aggregation of the provisions of these various plans. Now one of the things that's considered in here is fire, coordination of fire. And that was also one of the things that we recognized early on as needing strengthening in coordination and get our act together better on how we're going to deal with each other in the various units in terms of fire management. Well, that's, this aggregation document itself is phase one. And so, phase two is the kind of a follow up, what are we going to do about it, kind of thing. And before we could get onto phase two, why the summer of 1988 arrived and that's what your project is about, because it was just really too early to have an improved level of coordination in fire management in place when the fire season, this historic fire season hit. But on page 3-88 of the document it shows the different provisions for fire management in the different units and it shows the intensity of fire danger, and that type of thing, high, moderate, or low fire danger. And then there's usually a map, I think there's a map that's connected with that also, that shows the areas of greatest fire danger, I guess that's the way it works. But anyway, this particular section deals with fire management, prescribed fire and what the various plans call for, so that's worth your time looking into. I wanted you to have that much of a background because I think if we could have postponed the '88 fire season another year until we had a chance through our follow up phase two improved coordination efforts, we would have probably been in better shape to deal with the '88 fire season. To our credit, and this just fortunate that it worked out that way, we did have our coordinator position, our planning leader . . .

DP: Jack Troyer?

ST: . . . Jack Troyer's position on board, headquartered in Billings. But he spent most of his early time in that job at West Yellowstone doing the Greater Yellowstone Coordinating Committee job of coordinating with Area Command and with the various incident commanders. So that was lucky it worked out that way.

DP: You say that there's been a dialogue of cooperation though that extends back to the late '50s and '60s?

ST: That's correct.

DP: What issues would be items of discussion for cooperation?

ST: Oh, if there's going to be a road built through that part of the country, where it would go, and how it would connect. Road or trail maintenance, standards, the Greater Yellowstone Coordinating Committee worked on standards for outfitters and guides so that they're uniform between the parks and the forests, because you can imagine when an outfitter for instance who holds a permit to outfit and guide hunters and recreationalist in both the park and the forest, different forests, different parks. And then if we've got different standards and different procedures, why it really makes it difficult for them. So, this is kind of a service to the public and a service to the various clientele in that area. The Greater Yellowstone Coordinating Committee which really hadn't, never was named that until fairly recently, formally. And, but this was

kind of the precursor, if you will, of the Greater Yellowstone Subcommittee of the Interagency Grizzly Bear Committee. And a lot of the provisions and the various policies related to grizzly bear management were actually developed by this same group. And are now kind of taken over by the Greater Yellowstone Subcommittee of the Interagency Grizzly Bear Committee. And what I'm saying is, as an example, there are standards for sanitation, are you familiar with that at all?

P: Yeah, for the gate communities so that . . . .

T: Communities and in the woods too. Because the greatest single threat to, in addition to loss of habitat, but the greatest single threat to grizzly bear survival and recovery is the hazard of a bear becoming habituated to food provided by humans. And so, to avoid that, why, people need to know how to handle their food and including horse food when they're in grizzly habitat, when they're hiking or camping or whatever. And we say, hang the food out of reach of the bear, ten feet high or better. Put it in a bear resistant steel box, or someway or another keep it so that the bear can't get at it so he doesn't get habituated to food, human food, because if they do, then they're looking for that easy hand out all the time. And eventually that bear gets killed because it's a spoiled bear and it loses it's fear of humans, that type of thing. So that was one of the things this summer in the fire season that was going on that was a special requirement in the various fire camps, because most of that area is grizzly bear habitat. So, for instance they couldn't have normal fire camp kitchen procedures in a lot of those back country camps. They had to cater them, they had to fly the meals in and fly the garbage out so that they weren't leaving garbage for bears. That was pretty important, and they did a very good job of it for the most part. They had a little bit of problem on the, some of those north end fires because of the weather socked in and they couldn't get the flights. I mean the visibility, it wasn't the weather, it was the visibility factor. Couldn't get the flights to get in to service those camps

P: So did they have to set up kitchens or?

T: I'm not sure what they did, but I understand that there was some problems of garbage being left more than over night and that attracts bears.

P: Maybe you could tell me a little bit about the circumstances behind and also the nuts and bolts of how the decision was made to set up Area Command?

T: Okay. Well, Area Command is a concept of the Incident Command System that hadn't been used an awful lot yet, to my knowledge anyway. The only other Area Command that we've had in our region was on the Boise two years ago, where we had multiple fires and we set up an Area Command to coordinate the allocation of resources and so forth. But, when we started realizing that we had multiple fires, and that we had a strong need to coordinate the activities between those fires, the allocation of resources and setting of priorities, why the, it's my understanding that our staff, our fire staff recognized that first, and made the preliminary arrangements, including the drafting of the authorization document to set it in motion. I was in travel status when that first took place and got back in time to come in the office and sign the authorizing document, to the initial area commanders and in effect, one of the four signatures that established Area Command.

Now, we've just been through the review of the effectiveness of Area Command in Denver last week and it was a preliminary review, because the

report on that phase of the activity won't be out in final until the middle of February, we agreed to that time frame. But, as this same time last week, we heard and looked at the reports from the four fire reviews that we asked for. And those are already done, they're made public, those four reports. The Area Command review is not done, and it's not made public yet. But, some of the frustrations, and I guess the single most significant frustration, if you will, of the area commanders was that it was some confusion over what, exactly what were we delegating, we the GYCC, were delegating to them in the way of authority. It was my understanding, initially, and I think the rest of the other regional foresters and Park Service regional director, you can verify this with them as you may need too. Do you need another pen?

DP: I might.

ST: It's my understanding that what we were telling them was, that we want Area Command to coordinate the fires to the extent that people on one fire know what's going on in the other fires, and they're not making decisions or threatening each other through the various actions they're taking, to be the control over the distribution of scarce resources, firefighters, and firefighting equipment, and to be kind of the eyes and ears of the fire overhead organization as it relates to the multiple fire situation. It was not, at least not my intent, that Area Command would be in charge of strategy for firefighting on the different fires of the different incidents. But, that would be left to the discretion and judgement of the different incident commanders. Now, apparently the area commanders thought, and we had several different ones, you know, it was a paired situation. One Park Service, one Forest Service, but several individuals went through those chairs over the period of time. But, it was my understanding, at least the last pair, felt very strongly that they should have had stronger authority to actually be in charge of firefighting strategy as well. We didn't, at least I didn't, intend that be the case. That's something we're going to have to consider for future years if we ever have another one like this, we'll have to think that through again as to, was that a fatal flaw? Was it a serious thing? Would it have been more effective had the Area Command been delegated clearly that additional authority? I personally don't think it would have made much difference in the outcome in terms of burned acreage or anything else. That's conjecture too.

But, I think Area Command was a very needed and a very successful component of that whole fire management situation, because I just can't imagine how, there were thirteen different major fires as I understand it and at one time or another, there were probably half a dozen, eight or ten different incident commanders functioning and maybe more than that. And for them to be doing their work completely independently would have been just a circus. So, I think Area Command really performed a valuable service, even if they were a little frustrated that they didn't have as much authority as they thought should have.

Same time, Dave, I had a little concern, personally, that Area Command grew to such a size and I guess that's kind of normal, things like that happen if there was a job to be done and they needed somebody to do, they ordered people freely. I envisioned Area Command to be an organization of, oh, six or eight people, maybe, that were kind of overseeing the whole thing to that extent as far as allocation of resources. It got to be over 200 people in Area Command before it was over. So, probably underestimate it, but, I think that it was over done.

DP: We've touched base on coordination, how about cooperation? The Park Service and the Forest Service have different missions though maybe you can comment on how those missions, maybe, are becoming closer as time progresses. But, how is the cooperation not only from the top but the various levels on down?

ST: Well, of course, that's why we made such a point to meet on a regular basis, so that we do know each other and we don't have to start cooperating when some emergency takes place. I just can't imagine how last summers events would have worked if we hadn't had a good solid relationship, Park Service, Forest Service, managers involved, ahead of time. We had that, it was well in place and it wasn't a case of calling somebody up and wondering who you were talking to, they were well acquainted. And so, get back to your original question here though, in terms of missions. They are distinctly different, but they're overlapping, the two missions, of the two agencies. We both provide a public service and an outdoor recreation experience for the public. Different in some ways, some ways, theirs is a good deal more structured, a good deal more organized in terms of the nature hikes, and camp fire services, and interpretive programs, and permits for back country hiking and camping, and that type of thing. Ours is not nearly that structured or controlled, but we both provide a similar kinds of things. Camp grounds, picnic grounds, things like that. We both do some job in wildlife, or wildlife habitat management. Hunting's allowed on the forest and it's not allowed on the Park, and that is the basic difference there. So the state has a role on the forest and it doesn't have a role on the Park to speak of, and that's a difference.

They both deal together in a very strongly coordinated way on threatened and endangered species, and I mentioned the grizzly bear. So, there is a lot of overlap, but it really diverges strongly from there, because our mission, multiple use, includes commodity consumption, resource outputs for timber and for grazing and for minerals and things like that, and I mentioned the hunting is different. So, the two kinds of land and this document will tell you this, are different, overlapping, and both important to the overall public need for different goods and services. And so, these are some of the kinds of things we talk about, or have historically talked about in this coordination of interagency committee. They recognize our role in allowing oil and gas drilling, for instance or mineral extraction on the national forest and it stops at the Park boundary. The same thing with timber harvest, the Park Service recognizes that as valid to the kind of land that we administer. And we recognize the inappropriateness of those activities on the parks, so it's mutually understood.

Comes to cooperation, gosh, yeah, if there's, for instance, a need for gravel for a road that's crossing the boundary in both places, why, we don't need to each open up a gravel pit for that. We're going to cooperate and provide the gravel for the road out of one pit, and it's probably going to be on the forest. But if, there's certain cases where maybe not. So, those are the kinds of cooperative efforts we do get into. And cooperation in fire suppression is kind of the ultimate high intensity, high priority cooperation thing. And that's where the interagency Incident Command System is so important. Not only in Greater Yellowstone, but anywhere else that different agencies come together on boundaries to manage land. So, I guess, what I'm saying is that Incident Command System needs to be in place and functioning or at least planned

ahead of time. And we weren't in very good shape on that aspect of these fire incidents in Greater Yellowstone this year. We simply weren't as well prepared to deal with this kind of a event as I think we would have been if we had been able to do our follow up, the aggregation, phase two. As an example, we found out in the reviews of those different incidents, that we were using different terminology, we were using different perceptions of what prescribed fire really means. The difference between natural occurring fire and the term the media like to use of "let burn" and the procedure of having an advance prescription written with very concise, specific parameters in terms of fuel moisture and fuel loading, and fire danger measurements and that type of thing. In advance as specific guiding parameters on whether or not it is a prescribed fire and within prescription, or whether it is a wildfire and you take some suppression action, whether that's, confine it, contain it, or control it.

DP: There's been a change in attitude towards fire policy during the last two decades, decade and a half. You want to comment some on that? And then as you're doing that, comment on how fully integrated that is into the Forest Service and the Park Service at both levels, and also, then at the end of that, look at the public understanding of that.

ST: Okay. Just to be very frank, I think that we found out at the session in Denver, the review session in Denver last week, that the Park Service, and I don't want to sound critical of them, it just happened that way, were really not up to speed, if you will, on procedures and terminology and preparedness in this interagency Incident Command System, in that area. And so, when the emergency came and we had to be dealing with those systems that brought on some degree of confusion. For instance, the Mink fire, started by lightning on the Bridger-Teton and the Teton Wilderness, it was, it met our advanced prescription definition and it burned in prescription in the Teton Wilderness, under Forest Service management for three days. And when it reached that stage where it was after three days, we realized that while it was technically still within prescription our ability to keep it there was going fast. And we needed to change the category of that fire and call it a wildfire, put it in a containment strategy or confinement strategy as the thing progressed. But, to do some active work to make sure that we were managing, actively managing that fire, and not just watching it under prescription. And, so, we did that and it, the advance, over the weeks that followed, took it clear up to the Park boundary over at Yellowstone Meadows. And when it reached the Park, and the Park Service took over that fire, their handling of it was not much different than our handling had been in confining it, rather than actively trying to control it. Putting a lot of man power and equipment on it, trying to put it out. We weren't trying to do that, and they didn't try to do that. But as it happened, they called it a prescribed wildfire, or excuse me, a prescribed burn. But they didn't handle it any different than we did.

So, it's just a matter of terminology and they weren't currently up on the terminology that was really applicable in the interagency Incident Command vernacular to deal with that, and that caused some confusion. Because there's no provision in Incident Command or in the way we manage fire for a fire to go from prescribed to wild, back to prescribed. Once it's a wildfire it's a wildfire until it's contained or out or whatever. And yet that did happen there and it wasn't that they were wrong or that they messed up, it's just that the terminology applied to it led to

confusion and some misunderstandings between out two agencies. Certainly misunderstandings as far as the public was concerned. So, that's kind of an example of the how the Incident Command System was not fully operational in the Greater Yellowstone Area to be prepared to deal with this summer's events. What was the other part of your question, Dave, I'm sorry.

[TAPE INTERRUPTED]

ST: . . . enough to deal with the protection of public property and so forth. And it's easy to second guess and that kind of thing, and it's easy to misunderstand. I think that both the Park Service and the Forest Service in certain cases tried to develop and convey some land management objectives to the incident commanders and saying, we'd rather, if you don't have to, that you don't run a bulldozer through this particular country and create a permanent scar. And we told our incident commanders that on several fires on wilderness in Region 4. We said, do what you have to in managing this fire, to achieve suppression, and suppression can take several forms. But, if you can help it, don't run a dozer line in the Teton Wilderness for instance, or the Bridger Wilderness on the Fayette fire. Because we knew that once a big wide dozer line or a series of dozer lines was in place that scar was going to be there forever. We also knew from the fire behavior that we'd been observing that a dozer line was probably not going to hold it anyway. So, we thought we were better off, and I think we were proved correct, to get back to some sort of a natural barrier or rock out cropping, or stream, or something like that, and burn out from there back to the main fire. Set a back fire, as it were, or burn out the line. That terminology is not exactly right, because a back fire technically is something that's a little more precise than just burning out a line. But, in any case, we felt that was a lot more effective firefighting technique, than to just try and run dozer lines, or the harsher treatment on the landscape. And this is part of the, what was commonly referred to as the "light on the land" technique in firefighting to avoid the permanent scarring of the country. The Park Service had the same concerns, because Yellowstone's a jewel, and they didn't want to cris-cross it with a bunch of dozer lines that were going to be there indefinitely, if they didn't have to. And I can understand that. But, they were criticized by the public who really didn't tend to understand the difference in technique and the relative effectiveness of those different techniques in managing that kind of a fire. Nobody understood that very well because we'd never really experienced that severe of fire behavior, where fire was jumping a mile ahead of itself because of the high winds and that type of thing. So, when the Park Service or we, were quoted as saying, don't use dozers in a particular place. Probably what we had said, is, avoid using them if you don't have to because of those reasons I just mentioned. But all that somebody hears or reports, or the public hears is don't use dozers. Therefore, the connotation that we're constraining the firefighters and not doing all we can to put the fire out. Even though that might not have, and probably wouldn't have made a particle of difference in stopping the head of the fire.

P: So, there are two aspects, one is that it wouldn't have been effective, and second, even if it would have been effective, maybe the value lost would be greater by building the dozer line than letting the fire . . . ?

ST: Yes, there's other more effective techniques that are still considerate of the land that you're trying to protect. Kind of reminds me of the old, I don't know if you ever, you're not old enough to remember the old, you know, Little Abner and the, he had kind of a sub cartoon in Little Abner called Fearless Fosdick he was a detective, like Dick Tracy, it was kind of a parody of Dick Tracy. And I remember one particular segment that, I'm digressing here, hope you've got enough time. One particular segment where there was a shipment of poison pork and beans and Fearless Fosdick was trying to protect people from eating those poison pork and beans. And the way he protected them was when you see somebody about to eat it, he'd shoot them. And he'd shoot a big hole in them, you know, in the cartoon. And so, that's kind of the same idea, you protect the land by running a big dozer line and it's going to be there for a hundred years and the fire scar is going to be there for maybe a year. So, it doesn't make a whole lot of sense to indiscriminately fight fire with those techniques if you've got good alternatives to stopping the fire with, by burning from natural breaks and that type of thing.

DP: Let's talk management philosophy on those decisions. Who makes value decisions. Fore example, they used dozers around Grant Village because it was a value decision, that it was the greater value to use the dozer in that decision. Now, who has authority to make those sort of decisions as far as the management considerations? Is it the local, or is it. . . .?

ST: Yes, local. It's the basic line officer that's working with the incident commander to explain land management objectives in considering fire management. So, in other words in any fire situation, under Incident Command, we expect that the incident commander and the district ranger or the forest supervisor or both, will sit down and have an understanding together of what the land management objectives for the area are. The difficult scenario would be that on the Mink fire for instance, that the forest supervisor and the incident commander would discuss this and the supervisor might say, this is wilderness and it's a fragile piece of country and we know that it's going to be hard to get dozers into this area. And we know that if you do put dozers in why there's the fire scar, or the scar of the line is going to be there for a long time. And so, if you can do your fire control job, or your fire management job, I should say, suppression job, without the use of dozers, I'd prefer you do it that way. But, that's not to say if in your judgement that's the only way you can get that fire out, or do your suppression job that tool is not available to you, because it is. And then leave it up to the incident commander on the actual management of the fire. But they've agreed on the objective. The objective is to take it as easy as possible on that particular landscape, see. And still get your suppression job accomplished. And they may agree, that it's better to burn a few more acres than to tear up the country permanently. And that pretty well sets the course where the incident commander of saying, hey, I've got a natural cliff here, a rock out cropping that goes for a couple of miles. So, why should I run a dozer line up the meadow, why don't I back off to that rock out cropping natural barrier, burn from there back to the main body of fire and we've given up a few acres, but we were going to give them up anyway because that fire was going to jump that line anyway. So, that's the kind of thing they go through in strategizing and then the incident commander is responsible for the tactics.

DP: Could you comment on the relationship between the national forests and the parks to the communities that are heavily dependant upon them,

such as the gateway communities like West Yellowstone, Jackson, Coyote, Cook City. Is there much of a dialogue between the agencies and those communities?

ST: Oh, yeah. In our region we're not as much involved with that because the gateway cities that you mentioned are for the most part in the other regions. For instance, West Yellowstone, the Gallatin National Forest has ranger district headquartered at West Yellowstone and they, I'm certain they're part of the chamber of commerce. And the ranger probably belongs to the Rotary Club and everything else, they're part of the community. And I'm sure the community of West Yellowstone understands the value of the Gallatin National Forest and the various recreation and timber, different resource values that bear on the economy of that community. They are also acutely aware of the value of Yellowstone National Park as the primary tourist attraction in that area. So, both those lands have their different known values to the local communities. The reason I say, because we're really not involved, the only, in that particular situation is that the closest thing to gateway communities that we're directly interacting with is the Island Park down on the Idaho part of on the Targhee National Forest, which is not really a gateway community to the Park. Then Jackson which is the closest community to the south entrance. We have a forest headquarters in Jackson. We've got a good relationship with the community and so does the Park Service, of course, is also the headquarter, as it were, for the Grand Teton National Park.

DP: Can you think of anything in the past that's focused as much attention on wilderness values as this, and also, as you commented there was confusion and misunderstanding in the summer. Do you think that through this process that the understand will get better?

ST: Oh, I'm confident it will. As I say, in this phase two, is the follow up, corrective action if you will, the Greater Yellowstone aggregation, as we do plan amendments or in time revisions of existing plans. We're going to make a lot stronger coordinating provisions for fire management than we've had in place at the time this aggregation was put together. In addition, we've got the opportunity now and will probably never need it, this was, as you know, the 100 year event for fire in that area. But, we still have to have appropriate plans in place. We've got the opportunity now to get fire plans in a lot better shape for both the forests and the parks in that area. To deal with whatever level of fire emergency might come along in future years. So I feel, as I say, I wish we'd had that chance, I'm assuming we would have done the thing we needed to.

DP: The fires were covered on national news broadcasts for several weeks. Some of the issues were both misunderstood and harangued a little bit, but also brought forth and I'm sure some people gained a greater understanding. Do you think that this a better understanding is developing in the general public of these things?

ST: Well, I don't know. I don't know if the public is more informed or more confused as a result of the media coverage of last summers events, they show the chief of the Forest Service being interviewed, and the interviewer doesn't even know that it's Forest Service or Park Service. It was kind of disappointing in many cases. We're highly sensitive to that, and the general public is pretty oblivious to those kinds of details. There were some statements made concerning national forest wilderness and our policy in wilderness as it relates to fire being the same as the policy on the national park, and that wasn't very accurate

because the prescriptions, that the Forest Service writes for fire management and prescribed fire with all the precise parameters and the go, no go conditions, whether it meets prescriptions are very exacting, and that includes in wilderness. And the prescriptions that the Park Service had as I understand was kind of natural fire is good if it's not threatening life or property, we'll let it burn kind of approach, and that's distinctly different. I expect that out of the review on policy, the Park Service will probably, this is not history, this is a prediction and it's just my thought, they'll probably tighten that up, and write more definitive prescriptions for how to deal with natural fire or with the fires that they actually set to achieve various fuel reduction objectives or whatever it might be.

I didn't answer one of your questions you asked a little while ago about other things that pertain to wilderness and I'm not sure exactly how you asked it, but the other example was the getting back to the grizzly bear again, and the fact that the we've coordinated our efforts with bear management and the bear is an animal that depends on unpopulated back country type terrain. And the wilderness of the, designated wilderness of the national forest and the bulk of the Park are really ideal bear habitats. So, that coordination has been in place and continues to be in cooperation between agencies. We get a problem bear for instance, trapped in a Park camp ground, they're just as apt to release that bear trapped and relocate it across the line in the national forest as they are somewhere else in the Park, and vice versa.

DP: You've mentioned the reviews, what sort of things are coming out of the fires? Talk a little bit about the review process, whose involved in it, and also the scientific investigations that are coming out.

ST: Well, one of the things that was pretty strong coming out of the review was that it was a lot of misinformation about what could have been in the way of stopping those fires. And the data's available so I'm just not going to quote exact figures. The big bulk of the fires that started in Yellowstone area this summer were suppressed from the start. I mean it was suppression action from day one, hour one. There were only a handful of fires where there was a delayed suppression action and they were technically in prescription. I mention the one that the Mink fire that eventually got big. Conceivably if we had taken direct suppression action early on, on the Mink fire, we would have caught it because we caught a lot of fires that never did get big and you never heard about them this summer. The bulk of the fires starts were caught. And so that was a confusing thing from the standpoint of the public. They thought that there were a lot of fires and we didn't fight any of them and they got big and it did all this damage. Well, that really wasn't the case at all. There were a few that were allowed to get bigger than they might of, that was based as, you know Dave, on the historical records as far as the weather is concerned. And when all of the forecasters predictions didn't pan out and all the historical, logical predictions didn't pan out and it just, we waited, and waited and it never did rain in Yellowstone this summer. But it didn't, it didn't rain from before Memorial Day to after Labor Day and that's just unprecedented, that was a fire danger that we'd never dealt with before. And so, if we had known that was going to happen, there would have been strong aggressive control suppression action on every fire and we could have avoided some of this, but we wouldn't have avoided most of it because there was that policy in place and those kinds of efforts in place on most of the fires that did get big, and they still

got away because burning conditions were so severe and the wind, and the dry fuels, we simply couldn't stop the fire. All we could do is protect the improvements. I think they did a remarkable job of protecting improvements this summer. I was continually amazed that, when I heard, gosh they have another fire storm run on Old Faithful, and on Canyon Village, and one after another they named those places. And we saved them, the very big bulk of those improvements through those suppression efforts. We weren't stopping the fire, but we were keeping it out of the important facilities.

P: I was commenting to Doug Bird that it seems like the safety record was very impressive, do you want to talk about that?

T: Yeah. We emphasize safety and we tell the firefighters and the fire overhead that fighting this fire is important, but it's not as important as human life and we're not going to compromise human life in order to save some acres. So, they were listening, and they were very conscious of safety provisions and needs and the results pretty well spoke for themselves. I heard some things about the military that they were really surprised and impressed by our attention to safety as we fought those fires. Their overhead was, they said, there's a lot they could learn in the military from our techniques in that regard.

And incidently, the military was just a god send to us, since firefighters were so scarce this summer anyway. I don't know what we would have done in that fire campaign if it hadn't been the availability of those military forces, they were superb. They came to us organized.

DP: How did that come about?

T: Through an agreement between the natural resource managing agencies and the Department of Defense that's just been in place a short period of time. It was a lucky stroke that it was in place.

P: So it was already in place, this wasn't some sort of a fiat or . . . ?

T: Yeah, that's right. But, these firefighters as you understand they were organized, they were physically fit and they were well equipped, and well supervised, disciplined, all we had to do was teach them how to fight fire. And they learned very fast and they became very effective early on. So, it was really good.

P: What sort of activity is going on as far as research in the wake of the fire? I see there are some consortiums out.

ST: Yeah, there is, and I'm not sure where all that's going to lead. A lot of it has to do with how you rehabilitate fire afterwards, effectively. Again the forecasts were not very accurate because they were based mostly on historical things, but we were dependant on some of the fire researchers to give us some predictions on fire behavior. But, all the rules just kind of flew out the window because the weather and the conditions got so extreme that none of that activity was very predictable. It was worst than our worst case scenarios would have guided us to. I don't know the details that what is being planned in research. Are you going to interview Carter Gibbs, for instance, Carter is the Forest Service Assistance Station Director of the Intermountain Station down on the second floor in this building. Carter Gibbs, I'm sorry, Carter Gibbs, G I B S. And he's the guy you need to get some details on what's being planned.

DP: Oh, sure.

T: There's a bunch of universities that have formed a consortium just for this.

DP: Maybe just one last question, and then also, if you just, if there's anything else that you want to say and I'll listen. Yellowstone and the forests that surround it seem to be a national symbol. Comment on that and also just any thing that you feel is important about the fire, and also what you'd like me to do on this project.

ST: We talk about Greater Yellowstone and the Greater Yellowstone Area, and that's trying to imply or recognize that Yellowstone National Park, the first one ever designated and the oldest of the national parks, is kind of the basic drawing card or well known feature of the area. But, as a Coordinating Committee we also recognize the overall area is unique and needs to be managed in such a way that we're coordinating resource activities. That's why we've done this, why we have that coordination effort. We, the Forest Service and our friends in the Park Service do recognize the basic value of having those different land management objectives in terms of the public interest in that overall area. Certainly we wouldn't, as I mentioned, be proposing harvesting timber or permitting grazing into the Park. But, it's appropriate on the forest and they don't quarrel with that so, it works well. Again, the Coordinating Committee is really, I think, a very important entity to make sure that we don't get out of perspective or out of balance with the overall management of that area. And I'm optimistic if Congress will allow us to, without jumping in and legislating something in their infinite wisdom that would be overriding, that we could make the phase two coordination effort vary effective. And I think, the events of last summer, the trial by fire, pardon the pun, is going to strengthen us in helping us work toward that objective of better coordinated management overall in the phase two effort in the Greater Yellowstone Area, I really feel optimistic about that.

Other things I'd like to mention, have to do with the media coverage of those events last summer. We've never had anything quite like that before to my knowledge. We had reporters that were up there for a month at a time or more and that was the best documented fire event that's ever taken place anywhere. And it was because Yellowstone is such a special area. I don't think it was good recognition that it wasn't just the Park that was involved. You never heard much about anything else beside the Yellowstone National Park is burning. But, that didn't necessarily make it less important or bother us from the standpoint of participation coordination because we were right in there helping. In fact, we furnished the fires in a couple of cases. But, that was tremendous documentation and not all of it was all that accurate, but I think when you sort through the various video tape segments that are available, and all of the newspaper articles that were written. I think, there's a pretty good record available if you can sort it out into some concise document, and that's what I hope you'll be able to concentrate on, not just perception from the various people you interview, but how that jives with the way media tended to document that fire event this summer and see if you can kind of sort out what was accurate and what wasn't. It's not going to be real easy to do either.

DP: I have about a two cubic feet of clippings and they should be good. The different regions have helped me collect them which is nice rather than me having to find it myself.

ST: We've got a lot of video tape here.

DP: Yeah, right.

ST: I don't know how much you personally were able to get but I know that, it was really funny at home my wife had the video, our VCR set up

and every time a different station would come on with something on the fires she'd record it. And gad, she must have recorded two or three cassettes over the period of those fires. I brought them all in here to get copies. So, we've got all of that stuff just from my wife. And then of course, there were the other documentaries that were made and provided to us. So, we've got quite a file.

P: Are there, probably this is a question that I ought to direct more to the more localized people. Are there interest group, organizations . . .

[TAPE INTERRUPTED]

P: . . . shown either an interest in or else an idea of how things should be different or does that come to the region level?

T: Not to speak of. The recovery effort is taking a couple of forms. One is each forest is making it's own provisions and then that's being coordinated through the, we've assigned kind of an overall GYA recovery coordinator for the Forest Service, it's Ken Gallic from the, he's deputy forest supervisor from Gallatin, he has that as an assignment for a prolonged period of time, I'm not sure how long it's going to run. You'll want to talk to him. That's in terms of the fire recovery.

P: What's his name?

T: Gallic, I think it's G A L I C, Ken. He's in Bozeman. And he's working with and kind of reporting to Jack Troyer in this effort. So, I don't know who all has had that kind of volunteering input to date. I know there's been a lot of folks that have volunteered time as, terms of work and money for the recovery effort. A lot of them specify that specifically to the National Park in Yellowstone. And most of those are a result that they didn't realize that anything else was involved because of the way the media covered it. Maybe that's where they wanted it anyway, that's fine. But, we're getting some nonspecific donations and we're kind of trying to divide that as appropriate prorate. We're working with the National Student Conservation Association to work with them as volunteers to help with the recovery effort. There's a number of different companies that want to put up co-op money or matching money or whatever toward the recovery effort. In fact, there's very little that's needed to be done other than some erosion control seeding and that type of thing on a large percentage of the forest acreage that's in wilderness. There's some exceptions too, we've got a reforestation that needs to be done. We've lost plantations on the Targhee National Forest, for instance. But, most of the rehab that's planned is in either in the commercial timber areas of the national forest or within the parks, Yellowstone.

)P: How about your role as Regional Forester, do you take an active role in what is happening on the congressional forum?

ST: Yeah, that was hot and heavy, of course, for a little while when the various members either scheduled hearings for the committee that they were involved with or local hearings in the communities in terms of recovery or the what happened kind of oversight. But, there were two major hearings that were held, one in the Senate and one in the House, that was pretty well covered by our Washington office, and testimony, the chief testified. As regional forester I didn't go back to attend that and duplicate how the chief was interacting with them. I think our regional forester from Denver who is the Forester of the Rocky Mountain Region and is the Forest Service representative in this coordinating responsibility for Greater Yellowstone because he happens to be in the same town as the Park Service regional director. I think he did go back to those hearings and sat in on them. We didn't need to triplicate that kind of effort.

DP: Well, thanks for taking this time out to do this.
ST: Oh, you bet.
DP: Is there any other aspect you'd like to comment on?
ST: Well, maybe one other thing and that is a lot of the controversy that seemed to come up when the fires were going. It seemed to me like, was the result of the media wanting to deal with what's controversial, what's sensational. And so, typical situation is that the media would look for somebody that was outspoken to interview. And that might have been a firefighter from that regularly works for the California Division of Forestry was assigned as part of interagency Incident Command to, as a crew boss or a crew member on these fires. And so, when T.V. reporter, or radio reporter, or newspaper, whatever, sticks a microphone in their face and asks them to comment, they say something like, "Oh gosh, if we'd been turned loose we could have gotten this fire out ten days ago!". Why that's one individuals opinion, that may or may not be valid, but a lot of that got documented, and a lot of that added to the confusion and the controversy. And, that's just the way life is, as far as the media looking for something that's, as I say, sensational or controversial, because that's what sales newspapers and gathers customers for the T.V. or radio. And it's unfortunate that it's that way because it's not an accurate historical accounting necessarily. And in one case, I think, our fire staff officer on the Targhee made a statement that the North Fork fire could have been stopped at the boundary if we'd been permitted to put a dozer line across. Well, you know, it's hard to say that he was responding to a pressed interview type question and he was speaking his opinion. But, it came out in a way that it sounded like fact and it sounded critical of the Park Service and it caused some hard feelings at the time. It takes a while to smooth those things over, it strained our relationship. We really tested out togetherness on this whole thing, as a result of some things like that. And, again, it's just, I'm telling you that because, as you put the history together, why, these kinds of documented cases will be part of that. Some of it isn't all that valid other than one persons opinion. I don't know how you're going to deal with all that. I would say this, that those reports, the four review reports dug into this kind of thing pretty well and gave a pretty good accounting of it. Those are available.
DP: Those are available. Do you know where I can get a line on one, do you think Phil or Pat have an idea . . . ?
ST: Doug Bird has the copies that we have now, and those can be photo copied.
DP: What are the names of these, he gave me a review, but I think that was, is this the review that Kathy Davis, does that ring a bell.
ST: Kathy Johnson. No, neither one, Kathy Johnson's a congressional staffer. She visited the area, I thought maybe that's what you're talkin about. No, we, the Greater Yellowstone Coordinating Committee decided that, well in the first place it's a normal thing to do reviews of various fires at the end of the season. We do a few every year. In fact, we hav or are doing several in our region outside the Yellowstone area this year. And, what they do is interview people, and review the record, and if there's any recommendations for improved performance in future years they make those recommendations. So, that's what we commissioned for these, the GYCC did. Recognizing that there were, I think, the figure wa thirteen major named fires in the area. We bunched up four significant ones, that was the Clover-Mist, the combination of Storm Creek, and

Hellroaring, the North Fork which burned into Wolf Lake and that was a combination, but we called it North Fork. And then we did one called Huck-Mink, so those where the four. And in each case, we had a Park Service and a Forest Service leader, not from that area, somebody that we brought in to head the review team for those four different reviews. And we had co-leaders on each one of those reviews. And they had a membership of the review team of about five people each. And they spent two or three weeks gathering facts, interviewing people, looking at the record, and developing their reviews and their recommendations. We have those reports available for you to look at. I can show you one, that I kept a copy of Huck-Mink as we're ready to break up. It's still sitting on my desk, I think.

?: I'll go talk to Doug or someone that, you know, direct me to . . . .

?: Doug has our formal copies of all four of those reports. And in addition Dave, we did, we commissioned a team to do a review of Area Command, and I mentioned that when we started the interview. That ones not ready yet. We did get a preview in Denver last week of some of their conclusions, but they're still interviewing people and they, for instance, I interviewed with them last week in Denver. So, they've got awhile, they've got till the middle of February to produce their report. Okay.

DP: Great.

Interviewee: Walt Tomascak, Fire Use Specialist, Region 1, Region 1 Headquarters, Missoula, Montana.

Interviewer: David W. Peterson

Subject: 1988 Greater Yellowstone Area Fires

Date: 9 December 1988

DP: We'll start by saying that it's December 19th, Monday, and still in the A.M. and we're here in the regional headquarters of Region 1 with Walt Tomascak.

WT: Tomascak.

DP: Tomascak. And what's your official title?

WT: I'm the fire use specialist for Region 1.

DP: And he's been kind enough to talk to us today about the unplanned ignitions under the prescribed fire policy. Is that right?

WT: Yes, the agency has really never come up with a title for them but we refer to them as unplanned ignition prescribed fires (it appears that a new term has been adopted by the Department of Interior and the Department of Agriculture: these fires will be called "prescribed natural fires") to separate them from the planned ignition prescribed fires which we do for hazard abatement, habitat improvement, etc. In this region we burn 50,000 to 55,000 acres a year in planned ignition prescribed fires. The unplanned ignitions prescribed fire program is not unique to Region 1, but Region 1 probably has more activity in that program than the other regions. We have five million acres of area set up in the region that if certain conditions are met, we can allow an unplanned ignition to become a prescribed fire. As background using '87 as an example, we had 87 ignitions in the program, burned approximately 16,680 acres, I believe. At a cost of about $20,000.

In 1988, we only had nineteen ignitions. I believed the last ignition was July 23rd. At that point in time all of our areas were out of prescription because the Energy Release Component (ERC) values were to high. So, that's when the last prescribed fire occurred from an unplanned ignition. Of those nineteen ignitions five of them became wildfires.

Storm Creek was a fire on the Custer National Forest. It started back on June 20th and was a prescribed fire for less that two weeks. On July 3rd it was declared a wildfire. A Class I team was ordered. The team made an appropriate suppression response and at that point in time Storm Creek was no longer associated with the prescribed fire program. The appropriate suppression response used was successful until August 20th when Storm Creek made a tremendous run. Apparently the overhead team had used a containment strategy on the fire where they actually controlled a portion of the fire, approximately half of the perimeter. The strategy on the other half of the fire, due to cost and safety considerations was to

let the fire burn itself out in the wilderness area. That strategy was working well until the 20th when they had some unique weather conditions down in the Yellowstone area. The fire took off and I believe it went from about 5,500 acres to somewhere over 20,000 acres in one burning period. In any even that was one of the prescribed fires that went to wildfire status on us. There were two in the Selway-Bitterroot Wilderness that were declared wildfires, but that was more of a regional forester's decision at that point in time, that we didn't want any additional prescribed fires. They really were not causing any problems.

: Technically were they out of prescription?

T: Technically no they weren't. There were a great number of new lightning starts in the same general vicinity and we had quite an impact from smoke down in that country last year. It was decided to call these wildfires at that time. One of them got to about 1,900 acres and the other one was absorbed by some of the wildfires around it so we really don't know how many acres to attribute to it. It was about 200 or 300 acres when last identified as a separate incident. That leads us to Canyon fire and the Gates Park fires.

Canyon Creek was a prescribed fire that burned in the Scapegoat Wilderness and started on about the 26th of June. It was managed up until August 29th and the morning of August 30th it exceeded the wilderness boundary and became a wildfire at that point in time and an appropriate suppression action was taken and the fire was contained again, or at least partially contained. Then a kind of catastrophic wind event hit on September 6th, during the night. And that fire went from approximately 60,000 acres or there about to over 200,000 acres. It demonstrated a tremendous rate of spread and went out on the east side of the wilderness and forest into the plains. It's the one that had the most impact on private property and people. It's the one that was most unfortunate for the program. We were expecting a season ending weather event by that time. Normally we get one towards the later part of August. Had that occurred this year we wouldn't have had the problem with Canyon. But the rain didn't come and when coupled with the with the wind event really drove the fire well beyond the limits of where we wanted the fire held.

The last prescribed fire that eventually went to wildfire was the Gates Park fire. This was another big fire burning in the Bob Marshall Complex, the Lewis and Clark National Forest within the Bob Marshall Wilderness. The Bob Marshal, the Great Bear, and the Scapegoat, all comprise the big continuous land area that's referred to as the Bob Marshall Complex. The Gates Park fire started on July 11th and eventually grew to about 50,300 acres. It was declared a wildfire on September 6th, coincidental with the big wind event. The Main reason it was declared a wildfire, since it never got out of the wilderness, was that the governor had shut down the entire state to all uses of fire. It appeared inconsistent for the region to be managing a prescribed fire at the point in time when it was illegal to even have a charcoal fire within most areas of the state. So, to be consistent with what the governor was doing with the state wide regulations Gates Park was declared a wildfire. The actions on the fire didn't appreciably change from what they had been previous to that. Those are the five fires of the nineteen prescribed fires that did go to wildfire status. In summary, it appears to me that three of them went to wildfires administratively.

Another one, Storm Creek went to a wildfire, and appropriately so, on July 3rd and should have been stopped at that time. The only one that was

truly a prescribed fire that went awry as a prescribed fire would be Canyon Creek. And that was primarily due to, I feel, the weather that was experienced on that fire and some tremendous winds on it and lack of late summer moisture. Eventual size on Canyon Creek was 247,000 acres. It's been a long, long time since a fire has reached that size in this region.

DP: Was there a review done on the Canyon Creek fire?

WT: Yes, there's a regional review going on of the Canyon Creek and Gates Park. A fellow named Chuck Spoon of the Lolo National Forest is heading it up. The review team met last week and interviewed the line officers and other people involved with managing both Canyon Creek and Gates Park fires. There is also a national review, not of Canyon Creek specifically, but of the prescribed fire policy. That review is headed up by Roger Eubanks from the chief's office.

DP: That is the national fire policy review?

WT: This is a Forest Service review of the prescribed fire policy.

DP: Okay.

WT: This is different from the Secretaries' of Interior and Agriculture review, which was just released last Thursday on the 15th. A lot of reviews are going on. The regional review is getting quite specific to the Canyon Creek and Gates Park fires and included the chronology of both fires, the key decision points, that sort of thing. The Canyon Creek/Gates Park review team will meet again in January and will make a final report to the regional forester in about the third week of January. Somewhere between the 20th and 23rd of January a report is due to the regional forester.

DP: From your position here have you been able to get much of a feel for the public reaction to the unplanned ignition prescribed fire program?

WT: One of the main objectives of the program is to allow fire to play a more natural role in areas where it has historically been a factor. Many of these areas are now wilderness areas and without some kind of disturbance the flora and fauna would eventually change as the forest reached or approached a climax state. Fire is a natural and acceptable form of disturbance as opposed to logging. We try to let fire, as nearly as possible, with consideration for safety, etc., play its natural role. We must recognize that fire has a different role in different wildernesses. In areas like the Selway-Bitterroot, fire has occurred historically at a frequent interval, anywhere from say five to fifteen years. So when you get a fire in that kind of an ecosystem, it's generally a low intensity fire. It removes the ground litter and may take out some regeneration and occasional larger sized trees. Because of the frequent interval it keeps natural fuel loading at a lower level resulting in a lower intensity burn.

The Bob Marshall, on the other hand, has a particular vegetative type that's burned on a less frequent interval. It might have been anywhere from 100 to 300 or 400 years. When fire did come it was a stand replacement event. In other words, it took out all age classes of vegetation. Lodgepole was a typical species as well as spruce and fir. When stand replacement fire occurs they're not as pretty to look at. It's not a low intensity under-burn, but it is a natural force. It is the way lodgepole must regenerate itself. In fires absence the trees die, or become more susceptible to insects and diseases. It becomes more difficult for a new stand to get reestablished. Historically fire has come in much like it did in Yellowstone Park this year and cleaned up a

lot of the dead, diseased old growth lodgepole and other over-mature species that were there. That's the type of fire we deal with in the Bob Marshall Wilderness and the Bob Marshall Complex. Because they're stand replacement fires they exhibit violent fire behavior and may have flame lengths 200 to 400 feet. It is quite difficult to predict when the fire is going to come out of the crowns and lay down. Normally fire will come down from the crowns at night and become a ground fire. Humidities come up, temperatures drop, generally burning conditions at night are conducive to stopping the spread of these kind of fires. The phenomenon we had this year, with the high winds and the high temperatures and low humidities through the entire night, contributed to Canyon Creek becoming the problem it became. It didn't lay down at night and just kept progressing toward the Wilderness boundary. The fuels were abnormally dry in 1988. That, plus the thousand hour fuels, which are the three inch-plus fuels, were reaching fuel moisture percentages of somewhere in the neighborhood of 8 percent. Generally when they get down to 10 to 15 percent you've got the potential for a very severe fire. unfortunately, none of these things could have been predicted back in June when the decision was made to allow these fires to become prescribed. One of the inherent risks in the program is that your planning is based on having somewhat of a normal fire season. This year we had hotter than normal temperatures and drier than normal air masses, which contributed to these fuels getting drier than they normally do. The fires, once started, became more intense than what you would have normally expected. In 1988 they became so intense that elk were killed in some instances. You know you've got some pretty extreme fire behaviors when that happens.

I don't know if that answered your question Dave. The public generally has been supportive of the program. Certain users of these areas recognize the role that fire has played and they have been supportive of its use. Unfortunately, in a year like 1988 and with a fi like Canyon Creek that comes out of the wilderness and impacts people yo can lose that support very quickly. I'm sure that some of the local residents who were impacted by the fire would not even want to hear the words prescribed fire again. Others are still supportive or, at least if not supportive they understand the program, they understand the risks of living next to a wilderness and they understand the need for some kind of vegetative disturbance in the wilderness itself, if you want to preserve those values that you establish the wilderness for in the first place. So, it's a very complex situation. Generally, unless they were directly impacted by Canyon Creek or the Yellowstone fires you probably still find a lot of public support for the program. But, I'm sure you will find some people in the Augusta area that are quite opposed to any more fires.

)P: Well, thanks, could I get a copy of that?

WT: I've got a couple of things here that may be of interest. The first shows the historical track record of the program from 1972 to '88. Also, just so people don't think that all fires in these areas are allowed to become prescribed fires, here is another sheet that shows the number of ignitions in the same areas for the same year that were wildfires. For instance, from 1972 to 1988 while there were 378 prescribed fires, there were 1,402 other ignitions that were wildfires and that were suppressed as wildfires. That's why the agency has trouble with the term "let burn" policy because it implies a kind of crassness. The public may think that if there was a fire there we'll let it burn. This clearly shows that only one out of four or one out of five fires meets the criteria to become a

prescribed fire. And in some years, we don't allow any of them because of prescription criteria being exceeded. I guess, had we known in '88 that we were going to suffer the cumulated effects of the unusual weather that we actually got in July, August, and September we may not have had any of these nineteen prescribed fires that we had this year. I can make you copies of what we had in '88 if that would be helpful, Dave, and I can give you these two summary sheets.

DP: Thank you.